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SESSIONAL PAPERS

VOL. LXI.—PART IV

THIRD SESSION

OF THE

SEVENTEENTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO

SESSION 1929

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LIST OF SESSIONAL PAPERS, 1929

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TITLE	NO.	REMARKS
Accounts, Public	1	*Printed.*
Advertising, Departmental, Return	54	*Not Printed.*
Agriculture, Department of (Minister), Report	21	*Printed.*
Agriculture, Department of (Statistics), Report	22	*Printed.*
Archives, Report	45	*Printed.*
Auditor's Report	27	*Printed.*
Children's Protection Act	19	*Printed.*
Civil Service Commissioner's Report	48	*Not Printed.*
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Mines Department, Report	4	*Printed.*
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Northern Development and Colonization Roads Act, Report	49	*Printed.*
Ontario Athletic Commission, Report	41	*Not Printed.*
Ontario Railway and Municipal Board, Report	24	*Printed.*
Ontario Veterinary College, Report	29	*Printed.*
Parole and Probation Board, Report	16	*Printed.*
Police Commissioner, Report	47	*Printed.*
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LIST OF SESSIONAL PAPERS

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No. 1 Public Accounts of the Province of Ontario for the twelve months ending October 31st, 1928. Presented to the Legislature, February 26th, 1929. *Printed.*

No. 2 Estimates supplementary for the service of the Province for the year ending October 31st, 1929. Presented to the Legislature, February 26th, 1929. *Printed.* Further Supplementary Estimates for the year ending October 31st, 1929; presented to the Legislature March 20th, 1929. *Printed.* Estimates for the year ending October 31st, 1930; presented to the Legislature, March 25th, 1929. *Printed.*

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No. 3 Report of Department of Lands and Forests, Ontario, for year ending October 31st, 1928; presented to the Legislature, March 22nd, 1929. *Printed.*

No. 4 Annual Report of the Department of Mines, Ontario. Presented to the Legislature, March 8th, 1929. *Printed.*

No. 5 Annual Report of the Inspector of Legal Offices, for year ending December 31st, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 6 Report of the Superintendent of Insurance for year ending December 31st, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

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No. 7 Report of Registrar of Loan Corporations for Province of Ontario, for year ending December 31st, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 8 Report of the Minister of Public Works for the Province of Ontario for the year ending October 31st, 1928. Presented to the Legislature, February 28th, 1929. *Printed.*

No. 9 Annual Report of the Game and Fisheries Department, Ontario, 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 10 Annual Report of the Department of Labour, Province of Ontario, 1928. Presented to the Legislature, February 52th, 1929. *Printed.*

No. 11 Annual Report of the Department of Education, 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 12 Report of the Board of Governors of the University of Toronto for the year ending June 30th, 1928. Presented to the Legislature, January 31st, 1929. *Printed.*

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No. 13 Annual Report relating to Registration of Births, Marriages and Deaths, Ontario, for the year ending December 31st, 1927. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 14 Annual Report of the Department of Health, Ontario, 1928. Presented to the Legislature, February 28th, 1929. *Printed.*

No. 15 Annual Report of Inspector of Prisons and Public Charities upon Hospitals for the Insane, Feeble-minded and Epileptics of Ontario for year ending October 31st, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 16 Annual Report of the Ontario Board of Parole for years ending October 31st, 1927, 1928. Presented to the Legislature, February 6th, 1929. *Printed.*

No. 17 Annual Report of Inspector of Prisons and Public Charities upon the Hospitals and Charitable Institutions of the Province of Ontario for year ending September 30th, 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 18 Annual Report on the Prisons and Reformatories of the Province of Ontario for year ending October 31st, 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 19 Report of the Superintendent of Neglected and Dependent Children of Ontario for year 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 20 Annual Report of the Liquor Control Board of Ontario as at October 31st, 1928. Presented to the Legislature February 13th, 1929. *Printed.*

No. 21 Report of the Department of Agriculture, Ontario, for year ending October 31st, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 22 Annual Report of the Statistics Branch, Ontario Department of Agriculture, 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 23 Annual Report of the Temiskaming and Northern Ontario Railway Commission for the year ending October 31st, 1928. Presented to the Legislature, February 5th, 1929. *Printed.*

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No. 24 Annual Report of the Ontario Railway and Municipal Board for year ending October 31st, 1928. Presented to the Legislature, March 22nd, 1929. *Printed.*

No. 25 Return from the Records of the By-elections to the Legislative Assembly held on 1st day of November, 1927, and the 16th and 27th day of June, 1928. Presented to the Legislature, January 30th, 1929. *Printed.*

No. 26 Annual Report of the Hydro-Electric Power Commission of Ontario for year ending October 31st, 1928. Presented to the Legislature, March 8th, 1929. *Printed.*

No. 27 Report of the Provincial Auditor, 1927-1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 28 Report for 1928 of the Workmen's Compensation Board, Ontario. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 29 Report of Ontario Veterinary College for year 1928. Presented to the Legislature, March 25th, 1929. *Printed.*

No. 30 Regulations and Orders-in-Council made under the authority of the Department of Education Act or of the Acts relating to Public Schools, Separate Schools or High Schools. Presented to the Legislature, February 25th and March 13th, 1929. *Not Printed.*

No. 31 Orders-in-Council made pursuant to the Ontario Insurance Act and Guarantee Companies Securities Act—Department of Insurance. Presented to the Legislature, January 31st, 1929. *Not Printed.*

No. 32 Regulations and Orders-in-Council, made under the authority of the Department of Education Act or of the Acts relating to Public Schools, Separate Schools or High Schools. Presented to the Legislature, February 5th, 1929. *Not Printed.*

No. 33 Annual Report of the Commissioner under The Extramural Employment of Sentenced Persons Act for year ending October 31st, 1928. Presented to the Legislature, February 6th, 1929. *Printed.* (See Sessional No. 16.)

No. 34 Orders-in-Council made under the authority of The Northern Development Act, 1927, from March 1st, 1928, to January 29th, 1929. Presented to the Legislature, February 6th, 1929. *Not Printed.*

No. 35 Statement showing all sums credited to the Highway Improvement Fund and all sums chargeable thereto for year ending October 31st, 1928. Presented to the Legislature, February 12th, 1929. *Not Printed.*

No. 36 Report of the Distribution of the Revised Statutes and Sessional Papers for fiscal year ending October 31st, 1928. Presented to the Legislature, February 12th, 1929. *Not Printed.*

No. 37 Comparative statement of the Legislative grants apportioned to the Rural Public and Separate Schools in the Counties and Districts for the years 1927 and 1928. Presented to the Legislature, February 12th, 1929. *Not Printed.*

No. 38 Report of the Secretary and Registrar of the Province of Ontario with respect to administration of The Companies Act, The Extra-Provincial Corporations Act and The Mortmain and Charitable Uses Act, etc., for the year ending October 31st, 1928. Presented to the Legislature, February 13th, 1929. *Not Printed.*

No. 39 Return to an Order of the House, dated February 21st, 1928, That there be laid before the House a Return showing—1. How many power rights have been granted to corporations or persons in Northern Ontario. 2. Where are such power rights. 3. To whom were they granted. 4. When were they granted. Presented to the Legislature, February 25th, 1929. Mr. Fletcher. *Not Printed.*

No. 40 Annual Report of the Minimum Wage Board of Ontario, 1928. Presented to the Legislature, March 4th, 1929. *Printed.*

No. 41 Annual Report of Ontario Athletic Commission for year 1928. Presented to the Legislature, March 8th, 1929. *Not Printed.*

No. 42 Return to an Order of the House, dated February 8th, 1929, That there be laid before the House a Return showing—all areas of pulp or timber limits sold or disposed of from November 1st, 1927, to October 31st, 1928, the date when each area was first advertised, the date when each area was sold, the number of tenders received in respect to each area, the amount bid in each case by each one tendering for each of said areas, including the successful tenderer, the location and acreage or mileage of each parcel sold or disposed of, and the names and addresses of all tendering in each case, including the name of the successful tenderer. Presented to the Legislature, Mrach 13th, 1929. Mr. Mewhinney. *Not Printed.*

No. 43 Annual Reports of the Department of Public Highways, Ontario, 1926-1927. Presented to the Legislature, March 13th, 1929. *Printed.*

No. 44 Eighth Annual Report of the Public Service Superannuation Board for the year ending October 31st, 1928. Presented to the Legislature, March 18th, 1929. *Not Printed.*

No. 45 Report of the Department of Public Records and Archives of Ontario, 1928. Presented to the Legislature, March 19th, 1929. *Printed.*

No. 46 Annual Report of Mothers' Allowance Commission, 1927-1928. Presented to the Legislature, March 22nd, 1929. *Printed.*

No. 47 Annual Report of Commissioner of the Ontario Provincial Police for year ending October 31st, 1928. Presented to the Legislature, March 22nd, 1929. *Printed.*

No. 48 Annual Report of the Civil Service Commissioner of Ontario for year ending October 31st, 1928. Presented to the Legislature, March 25th, 1929. *Not Printed.*

No. 49 Report on operations under the Northern Development Act and Colonization Roads Act for year ending October 31st, 1928. Presented to the Legislature, March 26th, 1929. *Printed.*

No. 50 Return to an Order of the House, dated March 22nd, 1928, That there be laid before this House, a Return, giving the following information.—1. The total amount expended by the Province in 1927 upon the construction and maintenance, including interest, if any, paid on outstanding obligations upon.—(*a*) Suburban roads; (*b*) Provincial highways; (*c*) Provincial Suburban highways. 2. The total amount received by the Highway Improvement Fund in 1927: (*a*) From the issuing of motor licenses; (*b*) From the gasoline tax; (*c*) From payments made under The Highway Improvement Act, by the following cities, namely: Belleville, Brantford, Chatham, Fort William, Galt, Guelph, Hamilton, Kingston, Kitchener, London, Niagara Falls, North Bay, Oshawa, Ottawa, Owen Sound, Peterborough, Port Arthur, St. Catharines, St. Thomas, Sarnia, Sault Ste. Marie, Stratford, Toronto, Welland, Windsor and Woodstock, with the amount contributed by each of such cities: (*d*) From payments made by all other municipalities in Ontario. 3. (*a*) The total number of automobiles licensed in Ontario in 1927; (*b*) The total amount of automobile license fees paid in 1927; (*c*) The total number of automobile licenses in 1927 in each of the cities mentioned in clause 2 (*c*); (*d*) The total automobile license fees paid in each of the cities mentioned in clause 2 (*c*). Presented to the Legislature, March 27th, 1929. Mr. Pinard. *Not Printed.*

No. 51 Return to the Order of the House, dated March 29th, 1928, That there be laid before this House a Return, showing—1. The townships and lots in said townships now or formerly in the Crown, which were valued since January 1st, 1927, in connection with the acquirement of the same by or on behalf of the Spruce Falls Paper Company. 2. What disposition was made of such lands since such valuation. 3. The amount of the valuation of the same. 4. The parties who had charge of the inspection and valuation. 5. The total cost of the inspection and valuation. Presented to the Legislature, March 27th, 1929. Mr. Scott. *Not Printed.*

No. 52 Annual Report of the Niagara Parks Commission, 1928. Presented to the Legislature, March 27th, 1929. *Printed* (not bound in Sessional Volumes).

No. 53 Return to an Order of the House, dated March 31st, 1927, That there be laid before this House a Return showing—1. (*a*) Over how many townships or parts of townships, has E. W. Backus or any company controlled by him been granted timber cutting rights. (*b*) What is the total extent of such timber limits. 2. Under the original terms and conditions of such grants, have the said E. W. Backus or the said Companies been required (*a*) to install any pulp or paper manufacturing plant or machinery at any points and within any periods of time, and if so, at what points and within what periods; (*b*) to exercise their timber cutting rights within definite periods, and if so, within what periods. 3. (*a*) Have those requirements been strictly complied with, or have any extensions of time been granted the said E. W. Backus and the said companies to comply with same. (*b*) If so, when and for how long were such extensions granted. Presented to the Legislature, March 27th, 1929. *Not Printed.*

No. 54 Return to an Order of the House, dated March 29th, 1928, That there be laid before this House a Return furnishing the following information—1. In what newspapers, magazines and other publications, during the fiscal year ending the 31st October, 1928, has each Department of the Government inserted advertisements, notices and other like matter and where are the same published. 2. What total sums have been paid to each such newspapers, magazines and other publications. Presented to the Legislature, March 27th, 1929. Mr. Belanger. *Not Printed.*

REPORT

RELATING TO THE REGISTRATION OF

BIRTHS, MARRIAGES AND DEATHS

IN THE

PROVINCE OF ONTARIO

FOR THE

YEAR ENDING 31st DECEMBER

1928

(BEING THE FIFTY-NINTH ANNUAL REPORT)

PRINTED BY ORDER OF
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SESSIONAL PAPER No. 13, 1929

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SIR:—

I have the honour to submit for your approval the Fifty-ninth Annual Report made in conformity with and under the provisions of the Act respecting the Registration of Births, Marriages and Deaths in the Province of Ontario, for the year ending December 31st, 1928.

I have the honour to be, Sir,

Your obedient servant,

W. J. Bell

Deputy Registrar-General.

TO THE HON. FORBES GODFREY,
Registrar-General of Ontario.

To His Honour the Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:

I herewith beg to present for your consideration the Fifty-ninth Annual Report of the Registrar-General, relating to the Registration of Births, Marriages and Deaths in the Province of Ontario during the year 1928.

Respectfully submitted,

FORBES GODFREY,

Registrar-General of Ontario.

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REPORT UPON
Births, Deaths and Marriages
FOR THE YEAR 1928

Herewith is presented the Fifty-ninth Annual Report of Vital Statistics for the Province of Ontario.

POPULATION

The estimated population is 3,229,000, distributed as follows:

City municipalities	1,336,421 or 41.38 per cent.
Towns (over 5,000 population)	213,255 or 6.60 per cent.
Rural (including all other municipalities)	1,679,324 or 52.00 per cent.

ESTIMATED POPULATION BY AGE GROUPS

	Total	Male	Female
	3,229,000	1,638,000	1,591,000
– 1	72,011	36,691	35,320
1	66,358	33,743	32,615
2	73,457	37,182	36,275
3	73,457	37,182	36,275
4	73,298	37,182	36,116
5– 9	356,641	180,835	175,806
10–14	341,478	173,628	167,850
15–19	331,249	166,421	164,828
20–24	315,028	155,610	159,418
25–29	269,725	134,808	134,917
30–34	228,768	115,807	112,961
35–39	206,197	105,487	100,710
40–44	178,424	91,237	87,187
45–49	152,934	78,952	73,982
50–54	132,895	68,141	64,754
55–59	102,551	53,071	49,480
60–64	89,958	46,683	43,275
65–69	64,772	33,907	30,865
70–74	46,993	24,242	22,751
75–79	28,748	14,906	13,842
80+	24,058	12,285	11,773

BIRTHS

	1928		1927	
	Number	Ratio	Number	Ratio
Province	68,510	21.2	67,671	21.2
Cities	31,602	23.6	30,393	22.7
Towns	5,939	27.8	4,041	26.0
Rural	30,969	18.4	33,237	19.6

The rate per 100,000 of population remains unchanged and but 839 more births registered than in 1927.

NUMBER OF BIRTHS AND RATE FOR 10 YEARS

Year	Number	Ratio	Year	Number	Rato
1919	62,774	22.0	1924	71,510	23.3
1920	72,511	25.1	1925	70,122	22.6
1921	74,152	25.3	1926	67,617	21.5
1922	71,320	23.9	1927	67,671	21.2
1923	70,056	23.1	1928	68,510	21.2

NATURAL INCREASE PER 1,000 OF POPULATION

Year	Births	Deaths	Natural Increase	Ratio	Year	Births	Deaths	Natural Increase	Ratio
1919.....	62,774	34,010	28,764	10.1	1924.....	71,510	33,078	38,432	12.5
1920.....	72,511	40,440	32,071	11.1	1925.....	70,122	33,960	36,162	11.6
1921.....	74,152	34,551	39,601	13.5	1926.....	67,617	35,909	31,708	10.0
1922.....	71,320	34,034	37,286	12.5	1927.....	67,671	34,775	32,896	10.3
1923.....	70,056	35,636	34,420	11.4	1928.....	68,510	37,128	31,382	9.7

The natural increase, i.e., the number of births over deaths, was 9.7 per 1,000 of population and is the lowest rate since 1918 when it was but 7.7.

ILLEGITIMATE BIRTHS

Rate per 1,000 living births.

Year	Rate	Year	Rate	Year	Rate	Year	Rate
1901.....	17.9	1908.....	14.9	1915.....	21.9	1922.....	21.2
1902.....	17.5	1909.....	13.7	1916.....	20.9	1923.....	22.5
1903.....	16.4	1910.....	19.3	1917.....	19.5	1924.....	24.2
1904.....	16.2	1911.....	19.4	1918.....	18.2	1925.....	26.8
1905.....	12.5	1912.....	21.3	1919.....	19.8	1926.....	26.9
1906.....	15.9	1913.....	21.6	1920.....	19.7	1927.....	28.9
1907.....	14.4	1914.....	22.1	1921.....	21.5	1928.....	31.7

The highest rate of illegitimacy occurred in 1928. The above table shows the rates for twenty-eight years. The increase in that period was 77 per cent.

STILL-BIRTHS

Year	Registered as Births	Ratio per 1,000 total births
1919.....	2,091	32.5
1920.....	2,495	33.3
1921.....	3,234	40.9
1922.....	3,115	41.8
1923.....	3,028	41.4
1924.....	2,594	34.9
1925.....	2,780	38.1
1926.....	2,812	39.9
1927.....	2,758	39.2
1928.....	2,793	39.2

PLURAL BIRTHS CLASSIFIED TO SHOW NUMBER OF CHILDREN BORN ALIVE AND STILLBORN BY SEX, 1928

Classification of Births		Ontario
Cases of twins.....		819
Two males (both living).....		232
One male and one female (both living).....		264
Two females (both living).....		226
One male living and one male stillborn.....		32
One male living and one female stillborn.....		6
One male stillborn and one female living.....		12
One female living and one female stillborn.....		22
Two males (both stillborn).....		11
One male and one female (both stillborn).....		6
Two females (both stillborn).....		8
Cases of triplets.....		7
Two males and one female (all living).....		2
One male and two females (all living).....		2
Three females (all living).....		2
One male living and two males stillborn.....		1
Total multiple births.....	No.	826
	M.	847
	F.	812
Total single stillbirths.....	No.	2,669
	M.	1,488
	F.	1,181
Total single living births.....	No.	66,975
	M.	34,526
	F.	32,449
Total confinements.....		70,470

MARRIAGES

	1928		1927	
	Number	Ratio	Number	Ratio
Province	25,728	8.0	24,677	7.7
Cities	15,242	11.4	14,059	10.5
Towns	2,112	9.9	1,499	9.6
Rural	8,374	4.9	9,119	5.3

There were but 51 more marriages registered for 1928 than for 1927.

NUMBER AND RATIO PER 100,000 POPULATION FOR TEN YEARS

Year	Marriages	Ratio	Year	Marriages	Ratio
1919	26,328	9.2	1924	24,038	7.8
1920	29,104	10.0	1925	23,074	7.4
1921	24,871	8.5	1926	23,632	7.5
1922	23,360	7.8	1927	24,677	7.7
1923	24,842	8.2	1928	25,728	7.9

The average age for men was 28.9 years and for women 24.9 years.

The greatest number of marriages occurred at the ages of 24 for men and 21 for women.

DEATHS

	1928		1927	
	Number	Ratio	Number	Ratio
Province	37,128	11.5	34,755	10.9
Cities	16,999	12.7	15,784	11.0
Towns	3,101	14.5	2,043	13.1
Rural	17,028	10.1	16,948	9.9

There was an increase of 2,373 deaths registered over those registered in 1927. The rate rose from 10.9 to 11.5, being an increase of 0.6, and is the highest rate since 1926.

DEATHS AND RATE PER 1,000 OF POPULATION FOR TEN YEARS

Year	Deaths	Ratio	Year	Deaths	Ratio
1919	34,010	11.9	1924	33,078	10.8
1920	40,440	14.0	1925	33,960	10.9
1921	34,551	11.8	1926	35,909	11.4
1922	34,034	11.4	1927	34,775	10.9
1923	35,636	11.8	1928	37,128	11.5

Rates per 100,000 of population in round numbers of tens to enable calculation of rates not published, based on population for 1928.

10	.309	60	1.858
20	.619	70	2.168
30	.929	80	2.478
40	1.238	90	2.787
50	1.548	100	3.096

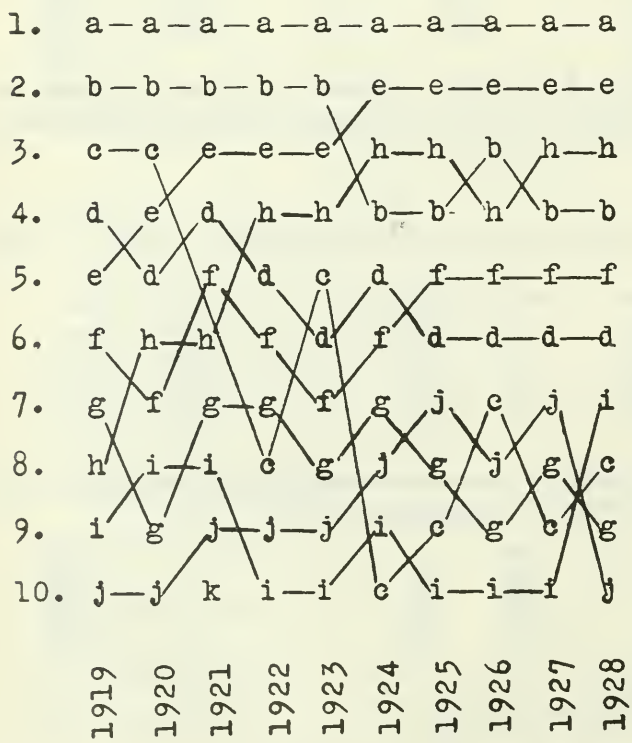
To use—Example: 46 deaths.
rate for 40 = 1.238 + rate for 6 = .185 = 1.423.

Example: 129 deaths.
rate for 100 = 3.096 + rate for 20 = .619 + rate for 9 = .278 = 3.993.

TEN HIGHEST CAUSES OF DEATH IN EACH YEAR PER 100,000 OF POPULATION

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
(a) Organic heart diseases	3,240	3,570	3,394	3,757	4,373	4,190	4,416	5,132	5,295	5,609
	113.6	123.4	115.6	126.0	144.3	136.8	142.2	163.1	166.1	173.7
(b) Pneumonia (all forms)	3,070	3,638	3,005	3,137	3,084	2,332	2,468	2,872	2,447	2,736
	107.7	125.7	102.4	105.2	101.8	76.1	79.5	91.5	76.7	84.7
(c) Influenza	2,522	3,276	.....	960	2,098	554	1,004	1,598	959	1,711
	88.4	113.2	.....	32.2	69.2	18.1	32.3	50.8	30.0	52.9
(d) Tuberculosis	2,215	2,280	2,083	1,979	1,989	1,823	1,842	1,835	1,803	1,832
	78.0	78.7	71.0	66.4	65.6	59.5	59.3	58.3	56.5	56.7
(e) Cancer	2,182	2,464	2,585	2,609	2,724	2,946	2,951	3,116	3,177	3,441
	76.5	85.2	88.1	87.5	90.0	96.2	95.1	99.0	99.6	106.5
(f) Accidents	1,630	1,805	1,893	1,807	1,791	1,760	1,871	1,901	1,997	2,355
	57.2	62.4	64.5	60.6	59.1	57.4	60.3	60.4	62.6	72.9
(g) Apoplexy	1,554	1,394	1,553	1,587	1,552	1,372	1,340	1,405	1,329	1,395
	54.5	48.2	52.9	53.2	51.2	44.8	43.2	44.6	41.7	43.2
(h) Diseases of the arteries	1,297	1,878	1,824	2,051	2,129	2,455	2,610	2,718	2,738	3,111
	45.5	64.9	62.2	68.7	70.3	80.1	84.1	86.3	85.9	96.3
(i) Infantile diarrhoea	967	1,554	1,327	948	692	659	883	615	573	643
	33.9	53.7	45.2	31.8	22.8	21.5	28.4	19.5	17.9	19.9
(j) Bright's disease	918	979	978	957	1,193	1,306	1,436	1,568	1,629	1,743
	32.2	33.8	33.3	32.1	39.4	42.6	46.2	49.9	51.1	53.9
(k) Diphtheria	.....	.....	65.3	.....	.....	.....	.....	.....	.....	.....
	.....	.....	22.2	.....	.....	.....	.....	.....	.....	.....

Diagram showing changes in position of the ten chief causes of death over a period of ten years.



a. Organic heart diseases.
b. Pneumonia (all forms).
c. Influenza.
d. Tuberculosis (all forms).
e. Cancer.
f. Accidents.
g. Apoplexy.
h. Diseases of the arteries.
i. Infantile diarrhoea (under two years).
j. Bright's disease.
k. Diphtheria.

It is interesting to note the changes in the ten chief causes. In 1919 cancer was holding fifth place. It began to climb and five years later, took second place, which it has held for the past five years.

Heart diseases hold first place in all the ten-year period; indeed for many years earlier than here shown these diseases have held this position and are not likely to be displaced for some time to come. Influenza is the only disease which superseded the heart affectations in this position. That was in 1918. during the famous "flu" epidemic. Its running-mate, in such circumstances, pneumonia, stood second in that year and indeed, held second place until 1923 when it dropped to the fourth position which it holds this year.

Tuberculosis has dropped from fourth to sixth place and its steady position here for the last four years indicates the need for continued warfare against this insidious foe.

Accidents, while showing a fluctuation during the first six years of the decade are altogether too near the top. These being largely preventable should not be so high.

Diseases of the arteries show a spectacular rise from eighth to third place which it has maintained in four out of the five latter years of the decade.

Infantile diarrhoea and Bright's disease show great fluctuations and diphtheria appears but once as a "chief cause" in the decade.

CHIEF CAUSES OF DEATH BY AGE GROUPS

Under 1		1 and 2		3 and 4	
1. Premature birth...	1,477	1 Pneumonia.....	230	1. Accidents.....	60
2. Malformations....	651	2. Diarrhoea.....	98	2. Diphtheria.....	52
3. Inf. Diarrhoea....	571	3. Inf. Diarrhoea....	74	3. Influenza.....	32
4. Pneumonia.....	533	4. Accidents.....	69	4. Pneumonia.....	28
5. Congenital debility.	341	5. Diphtheria.....	49	5. Diarrhoea.....	28
6. Injuries at birth...	273	6. Whooping-cough..	39	6. Tuberculosis....	24
7. Dis. of early inf'cy.	230	7. Tuberculosis.....	29	7. Whooping-cough.	14
8. Influenza.....	144	8. Measles.....	26	8. Appendicitis.....	14
9. Whooping-cough...	114	9. Meningitis.....	23	9. Scarlet Fever....	11
10. Convulsions.....	89	10. Malformations....	10	10. Measles.....	9

5 to 9		10 to 14		15 to 19	
1. Accidents.....	121	1. Accidents.....	111	1. Tuberculosis....	154
2. Diphtheria.....	73	2. Tuberculosis.....	61	2. Accidents.....	149
3. Appendicitis.....	48	3. Appendicitis.....	39	3. Appendicitis.....	52
4. Pneumonia.....	46	4. Heart diseases....	32	4. Heart diseases...	51
5. Tuberculosis.....	42	5. Pneumonia.....	28	5. Influenza.....	37
6. Influenza.....	36	6. Influenza.....	24	6. Pneumonia.....	33
7. Heart diseases.....	22	7. Diphtheria.....	15	7. Puerperal causes.	30
8. Scarlet fever.....	19	8. Rheumatic fever..	15	8. Rheumatic fever.	12
9. Diarrhoea.....	16	9. Malformations....	12	9. Epilepsy.....	11
10. Rheumatic fever...	16	10. Bright's disease...	12	10. Typhoid fever...	11

20 to 24		25 to 29		30 to 34	
1. Tuberculosis.....	252	1. Tuberculosis.....	213	1. Tuberculosis....	194
2. Accidents.....	163	2. Accidents.....	165	2. Accidents.....	120
3. Puerperal causes...	71	3. Puerperal causes..	80	3. Puerperal causes.	103
4. Heart diseases.....	57	4. Heart diseases....	71	4. Heart diseases...	77
5. Pneumonia.....	52	5. Pneumonia.....	59	5. Pneumonia.....	61
6. Influenza.....	39	6. Influenza.....	55	6. Influenza.....	49
7. Appendicitis.....	34	7. Suicides.....	27	7. Cancer.....	43
8. Cancer.....	18	8. Appendicitis.....	25	8. Bright's disease..	27
9. Suicides.....	17	9. Bright's disease...	18	9. Appendicitis.....	26
10. Bright's disease....	15	Typhoid fever....	14	10. Suicides.....	22
		10. Cancer.....	14		
		Epilepsy.....	14		

CHIEF CAUSES OF DEATH BY AGE GROUPS—Continued

35 TO 44		45 TO 54		55 TO 64	
1. Cancer	248	1. Cancer	528	1. Cancer	886
2. Heart diseases	235	2. Heart diseases	461	2. Heart diseases	881
3. Accidents	230	3. Bright's disease	234	3. Diseases of arteries	437
4. Pneumonia	180	4. Tuberculosis	227	4. Bright's disease	314
5. Tuberculosis	161	5. Pneumonia	222	5. Pneumonia	278
6. Influenza	141	6. Accidents	202	6. Apoplexy	209
7. Puerperal causes	106	7. Diseases of arteries	153	7. Accidents	205
8. Bright's disease	104	8. Influenza	137	8. Tuberculosis	164
9. Appendicitis	61	9. Apoplexy	93	9. Influenza	144
10. Suicides	56	10. Thyroid diseases	66	10. Diabetes	103

65 TO 74		75 AND OVER	
1. Heart diseases	1,553	1. Heart diseases	2,156
2. Cancer	1,001	2. Diseases of arteries	1,547
3. Diseases of arteries	935	3. Senility	814
4. Bright's disease	481	4. Cancer	695
5. Apoplexy	427	5. Pneumonia	597
6. Pneumonia	380	6. Bright's disease	547
7. Accidents	214	7. Influenza	498
8. Influenza	164	8. Accidents	374
9. Diabetes	134	9. Apoplexy	296
10. Tuberculosis	119	10. Paralysis	110

CHANGES OF POSITION OF THE TEN CHIEF CAUSES OF DEATH BY AGE GROUPS

It will be noted at once, when analyzing the chief causes by age groups that certain causes appear in certain groups only and not in all. This is, of course, due to the susceptibility of those groups to certain causes. It will be just as interesting to note those which do appear in many or all and their relative positions as group is compared with group.

In the first group, out of a total of 4,880 infant deaths the causes listed carried off 90 per cent. of all deaths in that group. Pneumonia is the only cause in this group which appears in the others and it appears in all the other groups.

It stands fourth "under 1" and first in "1 and 2" after which it falls back to fourth in "3 and 4" and in "5 and 6." From here on it stands in or close to the middle of each group.

Influenza, being eighth in the first group follows pneumonia fairly closely into the "3 and 4" and the "5 and 6" groups, being separated from it by diarrhoea in the former and by tuberculosis in the latter groups. After these, influenza and pneumonia alternate for fifth and sixth places up to the "30-34" group and then pneumonia continues on to the end more fearful than influenza which fluctuates a good deal in the older age groupings.

Organic heart diseases manifest themselves in the "10 to 14" group and hold the fourth place in every group to the end of 34 years when they are more active moving to second place from 35 to 64 years. Then they appear as the chief cause of death in all ages from 65 years onward.

Puerperal causes appear in the groups from 15 years to 44 years, but in the groups from 20 to 34 years in third place. This reflects strongly the need for education and instruction in respect to both pre and post-natal care. Puerperal causes in these groups really occupy second place since most accidents are to males. Indeed, 53 females only are reported from accidents in the three groups.

Diphtheria is active in all the younger groupings especially from 3 to 9 years of age.

Whooping-cough appears in ages from birth till the age of four years is passed, while scarlet fever makes itself felt from 3 to 9 years of age.

Typhoid fever appears in only one grouping, viz.: "15 to 19." Whether this is due to the thoughtlessness of youth linked with youth's daring which both manifest themselves in these ages would be interesting to know.

Tuberculosis soon makes its impression. Beginning with the "1 and 2" group it steadily advances until the age of 14 is passed, when it breaks into fury and slays in large numbers at the best and most hopeful ages of life, holding first place from 15 to 34 years, and taking its terrible toll out of the "20-24" group. That there is a steady general decline indicates that the health officials all over the province are keenly alive to its dangers.

Accidents makes its first appearance in the "1 and 2" group. The ages of learning to walk. Strangely, this cause disappears until the approach of active youth is reached, "15 to 19." This group includes the age of beginning work and accidents attains second place, which it maintains through young manhood that is, to the end of 34 years. Apparently men and women are beginning to learn how to take care of themselves for there is a slight drop. When full maturity is reached accidents ceases to be so effective and continues downward as a cause to the last group, but still holds a position which points to the need of education in respect to the avoidance of accidents.

Appendicitis is a cause in all groups from 3 years to 44 years, and is most prominent from 5 to 19 years.

INFANT MORTALITY

Deaths of Children Under One Year—Principal Causes of Death

Total Deaths

(A)	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	Mean
Total	5,999	7,802	6,763	5,921	5,950	5,418	5,530	5,302	4,812	4,880	5,837.7
1. Whooping cough	110	242	211	112	191	92	169	153	121	114	151.5
2. Influenza	207	248	.....	101	236	.....	123	164	96	144	131.9
3. Convulsions	265	231	170	146	113	128	107	102	84	89	143.5
4. Respiratory diseases	770	971	825	749	826	647	643	687	510	588	721.6
5. Diseases of digestive tract	905	1,420	1,176	810	741	650	767	594	564	690	831.7
6. Malformations	280	515	470	488	492	553	567	481	439	430	471.5
7. Congenital weakness	2,828	3,423	2,908	2,859	2,723	2,596	2,440	2,501	2,414	2,323	2,701.5
8. All others	634	752	1,003	656	628	752	714	620	584	502	684.5

(B.) Rate per 1,000 Living Births

Total	95.5	107.5	89.2	83.2	84.9	75.7	78.9	78.5	71.0	71.2	83.56
1. Whooping cough	1.7	3.3	2.9	1.7	2.7	1.3	2.4	2.2	1.8	1.7	2.17
2. Influenza	3.3	3.4	.....	1.4	3.4	.....	1.8	2.4	1.4	2.1	1.92
3. Convulsions	4.2	3.2	2.3	2.0	1.6	1.8	1.5	1.5	1.2	1.3	2.06
4. Respiratory diseases	12.3	13.4	11.1	10.5	11.8	9.0	9.2	10.3	7.5	8.6	10.37
5. Diseases of digestive tract	14.4	19.6	15.9	11.3	9.3	9.1	10.9	8.8	8.3	10.0	11.76
6. Malformations	4.5	7.1	6.3	6.8	7.0	7.7	8.1	7.1	6.5	6.3	6.74
7. Congenital weakness	45.0	47.2	39.2	40.0	38.8	36.3	34.8	37.0	35.7	33.9	38.79
8. All others	10.1	10.3	11.5	9.5	10.3	10.5	10.2	9.2	8.6	7.3	9.75

The number of deaths of children who died before completing the first year of life was 4,880, and, while the next smallest number in the decade, the rate per 1,000 living births is 0.2 higher than last year.

COMMUNICABLE DISEASES

The following table shows the number of deaths and rate per 100,000 of population for the communicable diseases:

	1919		1920		1921		1922		1923		1924		1925		1926		1927		1928	
Typhoid Fever	145	5.0	203	7.0	213	7.2	179	6.0	238	7.9	109	3.5	137	4.4	76	2.4	109	3.4	78	2.4
Smallpox	5	0.1	33	1.1	24	0.8	6	0.2	3	0.1	47	1.5	5	0.1	5	0.1	3	0.0	2	0.0
Measles	32	1.1	303	10.4	54	1.8	67	2.2	109	3.6	180	5.8	80	2.5	156	4.9	82	2.5	62	1.9
Scarlet fever	96	3.4	170	6.0	144	4.9	136	4.4	156	5.1	159	5.1	134	4.3	91	2.9	87	2.7	67	2.0
Whooping cough	164	5.4	376	13.0	310	10.5	200	6.7	318	10.5	147	4.7	273	8.7	245	7.8	181	5.6	175	5.4
Diphtheria	475	16.5	745	25.7	653	22.2	411	13.7	316	10.4	322	10.5	251	8.0	227	7.2	297	9.3	213	6.5
Influenza	2522	88.5	3276	113.4	509	17.3	960	32.2	2098	19.3	554	18.0	1004	32.3	1588	50.4	959	30.0	1711	52.9

Among the communicable diseases typhoid fever has again touched the low spot it reached in 1926 which was the lowest ever attained.

Smallpox, too, reached its lowest point ever attained there being but two deaths reported in the year.

While deaths from measles are lowest since 1921, in 1919 there were just about half the number of deaths as compared with this year.

Deaths from scarlet fever are the smallest in number during the decade.

Whooping-cough is lowest since 1923.

Diphtheria has reached the lowest point ever attained.

Influenza is up about 73 per cent. over 1927, but still did not reach an alarming rate.

TUBERCULOSIS

DEATHS IN ONTARIO FROM TUBERCULOSIS BY AGES 1919–1928

Year	Total	Ratio per 100,000	Under 5 years					5-9	10-14	15-19	20-29	30-39	40-49	50-59	60-69	70-79	80 and over	Not stated	Total deaths from all causes.
			0-1	1	2	3	4												
1919	2,215	78.0	44	32	21	12	25	61	54	175	575	459	311	192	155	66	11	22	34,010
1920	2,280	78.7	48	37	24	21	14	52	74	177	602	480	323	195	146	55	9	23	40,440
1921	2,083	71.0	54	36	28	15	9	39	47	162	578	428	259	192	145	80	8	3	34,551
1922	1,979	66.4	45	31	19	16	13	39	51	154	548	408	261	175	127	75	9	8	34,034
1923	1,989	65.6	47	35	18	16	11	52	55	141	507	422	282	168	158	60	10	7	35,636
1924	1,823	59.5	33	27	22	13	14	41	63	127	448	372	242	182	150	77	7	5	30,078
1925	1,842	59.3	50	32	22	22	7	43	46	146	471	361	257	182	132	56	13	2	33,960
1926	1,835	58.3	39	38	21	13	13	36	67	147	428	363	256	181	142	75	15	1	35,909
1927	1,803	56.5	30	27	13	7	11	37	59	171	417	365	279	160	127	72	15	13	34,775
1928	1,832	56.7	29	22	7	15	9	42	61	154	465	338	278	208	125	59	13	7	37,128

It will be noted that the death rate from tuberculosis is still down to a point which indicates the influence of the preventive measures against it by the health authorities. The greatest drop in the rate appears as between the years 1923 and 1924 and there has been no rise. There is no let up, however, to combating its ravages, which takes place especially among the youth of the land.

NUMBER OF DEATHS IN EACH AGE GROUP AND RATE PER 100,000 POPULATION.

	1924				1925				1926				1927				1928			
	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate	Male	Rate	Female	Rate
Under 1 yr.	16	49.6	17	54.0	23	70.4	27	86.1	22	66.5	17	52.4	20	58.9	10	30.9	13	35.4	16	45.3
" 1 "	7	22.2	20	64.6	17	53.1	13	41.4	24	74.0	14	44.0	12	36.4	15	46.7	9	26.6	13	39.8
" 2 yrs.	12	37.9	10	32.8	8	25.6	14	45.2	12	36.8	9	28.7	7	21.2	6	18.9	4	10.7	3	8.2
" 3 "	6	19.0	7	22.6	10	31.2	12	38.6	6	18.5	7	22.0	4	12.0	3	9.40	7	18.8	8	22.0
" 4 "	7	21.5	7	22.3	2	6.07	5	15.7	3	8.99	10	30.5	5	14.6	6	18.2	4	10.7	5	13.8
5 to 9 yrs.	17	10.4	24	15.1	22	13.3	21	13.0	13	7.79	23	14.0	16	9.42	21	12.7	19	10.5	23	13.0
10 " 14 "	31	21.4	32	22.5	17	11.5	29	20.0	30	20.0	37	25.2	26	17.0	33	22.3	18	10.3	43	25.6
15 " 19 "	43	29.8	84	69.0	60	41.0	86	69.7	47	34.0	100	73.8	47	33.6	124	90.2	60	36.0	94	57.0
20 " 24 "	88	71.6	140	111.4	84	66.1	158	124.9	82	63.1	121	95.1	80	63.0	128	95.8	100	64.2	152	95.3
25 " 29 "	119	95.4	101	81.4	104	81.9	125	99.7	94	72.4	131	103.4	92	71.4	117	89.7	103	76.4	110	81.5
30 " 34 "	111	93.9	89	77.0	104	80.6	95	81.2	91	74.8	102	86.0	91	73.7	97	80.6	87	75.1	107	94.7
35 " 39 "	78	67.0	94	83.0	107	91.8	55	47.5	92	78.4	78	66.0	97	78.4	80	70.5	76	72.0	68	67.5
40 " 44 "	74	74.2	64	66.7	71	70.7	74	75.8	87	85.8	60	60.3	77	73.2	64	65.1	86	94.2	76	87.1
45 " 49 "	59	69.6	45	54.6	73	85.7	39	45.7	67	78.2	42	48.2	72	79.1	66	78.6	70	88.6	46	62.1
50 " 59 "	105	78.4	77	59.9	110	81.1	72	54.6	98	71.3	83	63.1	85	60.3	75	60.2	126	103.9	82	71.7
60 " 69 "	88	100.6	62	71.8	79	89.3	53	60.3	83	92.7	59	66.1	68	73.4	59	66.7	65	80.6	60	80.9
70 " 79 "	36	88.7	41	101.8	32	77.2	24	58.9	45	107.2	30	72.9	38	92.4	34	81.0	31	79.1	28	76.5
80 yrs. and over.....	2	15.6	5	38.1	6	45.6	7	52.9	3	19.3	12	93.4	7	54.8	8	55.8	6	48.8	7	59.4

CANCER

The death rate from cancer and the number of deaths continue to increase. The number reported in 1928 being 3,441, which represents an increase of 10.4 per cent.

Table showing the distribution of deaths from various types according to class as follows:

	1919		1920		1921		1922		1923		1924		1925		1926		1927		1928	
Buccal cavity.	82	2.8	117	4.0	98	3.3	94	3.1	134	4.4	162	5.2	142	4.6	134	4.3	141	4.4	132	4.1
Stomach.....	623	21.9	782	27.0	860	29.3	869	29.2	938	31.0	1023	33.4	1050	33.8	1111	35.4	1115	34.9	1205	37.3
Peritoneum...	305	10.7	396	13.6	391	13.0	438	14.7	428	14.1	462	15.0	481	15.5	513	16.3	526	16.5	605	18.7
Female genital organs.....	181	6.3	234	8.0	236	8.0	244	8.2	283	9.4	323	10.5	333	10.7	353	11.2	348	10.9	337	10.4
Breast.....	128	4.5	198	6.8	235	8.0	231	7.7	279	9.2	320	10.4	331	10.7	307	9.8	310	9.8	344	10.7
Skin.....	58	2.0	49	1.7	66	2.2	77	2.6	81	2.7	85	2.7	81	2.6	88	2.8	75	2.3	72	2.2
Other or Unspecified...	805	28.3	688	23.7	699	24.1	656	22.0	531	19.2	571	18.6	533	17.2	610	19.4	662	20.8	746	23.1
Total.....	2182	76.5	2464	85.2	2585	88.1	2609	87.5	2724	90.0	2946	96.2	2951	95.1	3116	99.0	3177	99.6	3441	106.5

PERCENTAGE OF INCREASE OVER PRECEDING YEAR

1919.....	3.7	1924.....	8.1
1920.....	12.9	1925.....	....
1921.....	4.9	1926.....	5.5
1922.....	0.9	1927.....	1.7
1923.....	4.4	1928.....	8.3

	Males	Females
Cancer of the buccal cavity.....	108	24
" " stomach and liver.....	644	561
" " peritoneum, intestines and rectum.....	284	321
" " female genital organs.....	..	337
" " breast.....	2	342
" " skin.....	43	29
" " other or unspecified organs.....	490	256

The following table shows the difference in rates for the years 1908, 1918 and 1928.

	1908		1918		1928	
	No. Deaths	Rate	No. Deaths	Rate	No. Deaths	Rate
Buccal cavity	24	1.0	77	2.7	132	4.1
Stomach and liver	419	18.8	647	23.1	1,205	37.3
Peritoneum, intestines and rectum	106	4.7	281	10.0	605	18.7
Female genital	113	5.0	148	5.3	337	10.4
Breast	82	3.6	129	4.6	344	10.7
Skin	32	1.4	71	2.5	72	2.2
Other organs	572	25.6	750	26.8	746	23.1
Total	1,348	60.5	2,103	75.7	3,441	106.5

SPECIFIC DEATH RATES PER 100,000 POPULATION FROM CANCER BY AGE GROUPS

Ages	1923–1927		1928	
	Deaths	Ratio	Deaths	Ratio
Under 30	299	3.3	67	3.3
30–39	593	26.4	115	26.4
40–49	1,658	95.3	386	116.4
50–59	2,941	235.4	691	293.4
60–69	4,355	528.0	1,010	652.7
70–79	3,630	862.2	873	1,152.6
80 and over	1,436	1,148.0	299	1,242.8
Total	14,912	96.0	3,441	106.5

MATERNAL MORTALITY

Province—396, being 5.55 deaths per 1,000 births.*
Cities and towns—289, being 7.38 deaths per 1,000 births.
Rural—107, being 3.33 deaths per 1,000 births.

*Still births included.

NUMBER OF DEATHS AND RATE PER 1,000 BIRTHS (INCLUDING STILL BIRTHS)

	Province		Cities		Towns		Rural	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1919	284	4.38	126	4.63	36	8.31	122	3.66
1920	489	6.52	247	7.45	53	8.98	189	5.13
1921	387	5.00	189	5.59	26	5.08	172	4.46
1922	370	4.96	178	5.54	34	6.69	158	4.24
1923	369	5.05	182	5.73	40	7.83	147	4.06
1924	418	5.60	214	6.63	45	8.51	159	4.30
1925	388	5.32	200	6.20	33	5.91	155	4.41
1926	381	5.41	226	7.30	30	7.18	125	3.54
1927	403	5.72	246	7.74	32	7.58	125	3.62
1928	396	5.55	260	7.94	29	4.67	105	3.27

DEATHS OF FEMALES FROM PUERPERAL CAUSES AND FROM ALL CAUSES BY AGES—1924-1928

Ages 15–49	Deaths from		Deaths from puerperal causes per 100 deaths from all causes
	All causes	Puerperal causes	
15–19	403	30	7.45
20–24	480	71	14.80
25–29	482	80	16.60
30–34	447	103	23.01
35–39	529	72	13.60
40–44	683	34	4.98
45–49	789	6	.76

DEATHS AND DEATH RATES PER 1,000 TOTAL BIRTHS (INCLUDING STILL-BIRTHS) FROM SPECIFIED PUERPERAL CAUSES

	All Puerperal Causes			Accidents of Pregnancy			Puerperal Haemorrhage			Other accidents of labour			Puerperal Septicaemia			Albuminuria and Convulsions			Other Puerperal Causes		
	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.	Deaths	Rate	Per cent.
1919...	284	4.38	100.0	55	.85	19.4	40	.62	14.1	42	.65	14.8	85	1.31	29.9	57	.88	20.1	5	.07	1.7
1920...	489	6.52	100.0	76	1.01	15.5	45	.60	9.2	51	.68	10.4	156	2.08	32.0	123	1.64	25.2	38	.50	7.7
1921...	387	5.00	100.0	98	1.26	25.3	47	.61	12.1	48	.62	12.4	75	9.97	19.4	81	1.04	20.9	38	.49	9.8
1922...	370	4.96	100.0	78	1.05	21.0	55	.74	14.9	42	.56	11.3	59	.79	15.9	85	1.14	23.0	51	.68	13.8
1923...	369	5.05	100.0	53	.73	14.4	28	.38	7.6	29	.40	7.9	116	1.59	31.4	97	1.33	26.3	46	.63	12.4
1924...	418	5.60	100.0	54	.73	12.9	37	.50	8.9	53	.71	12.7	120	1.62	28.7	98	1.32	23.4	56	.75	13.4
1925...	388	5.32	100.0	45	.62	12.6	51	.70	13.1	47	.64	12.1	103	1.41	26.6	91	1.25	23.5	51	.70	13.1
1926...	381	5.41	100.0	40	.57	10.5	40	.57	10.5	51	.72	13.4	118	1.68	31.0	95	1.35	24.9	37	.52	9.7
1927...	403	5.72	100.0	30	.43	7.4	49	.70	12.2	38	.54	9.4	143	2.03	35.5	106	1.51	26.3	37	.52	9.2
1928...	396	5.55	100.0	36	.50	9.1	45	.63	11.4	51	.71	12.9	120	1.68	30.3	97	1.36	24.5	47	.66	11.9

The following table shows the percentage rates from the different types of puerperal causes:

DEATHS FROM SPECIFIED PUERPERAL CAUSES PER 100 DEATHS FROM ALL PUERPERAL CAUSES BY AGE, ONTARIO, 1924-1928

	Total 15-49	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Total puerperal causes.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Accidents of pregnancy.....	9.10	6.66	9.86	10.00	7.77	6.94	8.82	50.00
Puerperal haemorrhage.....	11.36	13.33	2.81	10.00	11.65	18.06	17.65	.....
Other accidents of labour..	12.89	6.67	7.04	15.00	16.50	8.33	26.48	.....
Puerperal septicaemia.....	30.30	40.00	36.66	30.00	27.19	30.55	17.65	33.33
Albuminuria and convulsions	24.48	26.67	35.18	23.75	17.47	26.40	20.58	16.67
Other puerperal causes.....	11.87	6.67	8.45	11.25	19.42	9.72	8.82	.....

PUERPERAL DEATHS BY AGE GROUPS

	Total	Ages at Death						
	15–49 years	15–19 years	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years
Total	396	30	71	80	103	72	34	6
Accidents of pregnancy	36	2	7	8	8	5	3	3
Puerperal haemorrhage	45	4	2	8	12	13	6	.....
Other accidents of labour	51	2	5	12	17	6	9	.....
Albuminuria and convulsions	120	12	26	24	28	22	6	2
Puerperal septicaemia	97	8	25	19	18	19	7	1
Other puerperal causes	47	2	6	49	20	7	3	.....

The number of deaths from maternal mortality was 396, with a rate of 5.55 per 1,000 total births—including still births. This number of deaths has been exceeded three times during the decade, viz., 1920, 1924 and 1927. The rate is higher in the urban municipalities by nearly 122 per cent. than it is in the rural municipalities and yet it is these urban centres that are presumably better equipped with hospitals and skilled physicians than the rural municipalities.

The table showing the number of deaths from puerperal causes, compared with the number of living births taking place in institutions and in the homes shows a preponderatingly larger number of deaths per 1,000 births in the institutions than out of them. The table is worthy of a close study.

MATERNAL MORTALITY, ONTARIO, 1928

Cities and towns, 5,000 population and over	Total		Institutional		Non-Institutional	
	Living births	Deaths from puerperal causes	Living births	Deaths from puerperal causes	Living births	Deaths from puerperal causes
Belleville	371	6	222	5	149	1
Brantford	711	9	412	9	299	.....
Chatham	494	3	309	3	185	.....
Fort William	664	3	280	2	384	1
Galt	266	.....	131	.....	135	.....
Guelph	362	3	174	2	188	1
Hamilton	3,007	29	1,488	21	1,519	8
Kingston	576	8	373	8	203	.....
Kitchener	751	6	283	5	468	1
London	1,438	6	897	4	541	2
Niagara Falls	445	1	120	1	325	.....
North Bay	435	3	103	2	332	1
Oshawa	703	9	300	9	403	.....
Ottawa	3,003	13	1,737	12	1,266	1
Owen Sound	368	.....	209	.....	159	.....
Peterborough	558	6	428	5	130	1
Port Arthur	558	1	330	1	228	.....
St. Catharines	570	7	226	5	344	2
St. Thomas	341	5	196	5	145	.....
Sarnia	426	3	206	2	220	1
Sault Ste. Marie	627	3	165	1	462	2
Stratford	401	3	210	3	191	.....
Toronto	12,342	111	6,522	96	5,820	15

MATERNAL MORTALITY, ONTARIO, 1928—Continued

Cities and towns, 5,000 population and over	Total		Institutional		Non-Institutional	
	Living births	Deaths from puerperal causes	Living births	Deaths from puerperal causes	Living births	Deaths from puerperal causes
Welland	279	7	76	7	203	.....
Windsor	1,681	12	662	10	1,019	2
Woodstock	225	3	130	3	95	.....
Barrie	169	1	96	1	73	.....
Brampton	135	1	68	1	67	.....
Brockville	217	2	177	2	40	.....
Cobourg	121	.....	58	.....	63	.....
Collingwood	95	.....	47	.....	48	.....
Cornwall	488	1	271	1	217	.....
Dundas	62	.....	8	.....	54	.....
Eastview	185	.....	.....	.....	185	.....
Ford City	347	1	4	.....	343	1
Fort Francis	189	.....	34	.....	155	.....
Hawkesbury	194	.....	17	.....	177	.....
Ingersoll	101	2	45	1	56	1
Kenora	216	1	125	1	91	.....
Leamington	93	.....	19	.....	74	.....
Lindsay	178	.....	84	.....	94	.....
Midland	223	.....	82	.....	141	.....
Mimico	129	1	21	.....	108	1
New Toronto	105	.....	26	.....	79	.....
Orillia	244	3	176	3	68	.....
Pembroke	292	5	125	5	167	.....
Port Colborne	137	1	.....	.....	137	1
Preston	113	.....	9	.....	104	.....
Renfrew	148	.....	46	.....	102	.....
Smith's Falls	166	2	114	2	52	.....
Sudbury	453	5	130	5	323	.....
Timmins	432	2	40	2	392	.....
Trenton	113	.....	.....	.....	113	.....
Walkerville	425	1	317	1	108	.....
Waterloo	116	.....	6	.....	110	.....
Whitby	53	.....	1	.....	52	.....
Total, cities and towns of 5,000 and over	37,541	289	18,335	246	19,206	43
Remainder of province	30,969	107	2,433	19	28,536	88
Grand total	68,510	396	20,768	265	47,742	131

Deaths of women not classified to pregnancy or child-bearing but returned as associated therewith, 1928.

ONTARIO

Causes of death	Number
All causes	82
Scarlet fever	3
Influenza	23
Mumps	1
Erysipelas	2
Tuberculosis of the respiratory system	6
Tuberculosis of the intestines and peritoneum	1
Cancer of circulatory system	1
Pernicious anaemia	4
Exophthalmic goiter	2
Other diseases of the thyroid gland	1
Acute myocarditis	1

ONTARIO—Continued

Causes of death	Number
Valvular diseases	4
Chronic endocarditis	2
Other diseases of the heart	1
Lobar pneumonia	11
Pneumonia—not otherwise defined	3
Pleurisy	1
Other diseases of the respiratory system (tuberculosis excepted)	1
Ulcer of the stomach	1
Hernia	1
Intestinal obstruction	2
Acute yellow atrophy of the liver	3
Chronic nephritis (including unspecified 10 years of age or over)	1
Homicide	6

ACCIDENTAL DEATHS

The following table shows the chief causes of accidental deaths, and rate per 100,000 of population.

	1919		1920		1921		1922		1923		1924		1925		1926		1927		1928		Per cent. change
Total	1,630	57.16	1,805	62.04	1,893	64.52	1,807	60.60	1,791	59.11	1,760	57.45	1,871	60.28	1,901	60.41	1,997	62.66	2,355	72.90	
Burns	173	6.07	200	6.91	108	3.68	133	4.46	133	4.39	113	3.69	122	3.95	130	4.27	104	3.26	143	4.42	+37.5
Drowning	328	11.50	299	10.33	358	12.21	277	9.29	266	8.58	308	10.05	326	10.48	298	9.78	313	9.82	373	11.5	+18.2
Falls	76	2.66	139	4.80	128	4.36	128	4.29	242	7.99	198	6.46	190	6.11	259	8.50	266	8.34	325	10.0	+22.2
Railroads	135	4.73	130	4.49	117	3.99	123	4.13	160	5.28	169	5.52	115	3.70	208	6.83	160	5.02	168	5.20	+10.5
Automobiles	91	3.19	119	4.11	108	3.68	103	3.45	208	6.87	205	6.69	256	8.24	242	7.96	387	12.1	437	13.5	+10.5
Fractures	207	7.26	261	9.01	301	10.26	247	8.28	145	4.78	169	5.52	196	6.41	199	6.54	192	6.02	191	5.91	+12.9
Other Accidents	620	21.7	657	22.7	773	26.3	796	26.7	637	21.0	598	19.5	666	21.4	565	17.9	575	18.0	718	22.2	+1.05

The number of deaths from accidents was 2,355, and the rate was 72.90 death for each 1,000 of the population. This represents an increase of 17.8 per cent. over the rate for 1928. It will be noted that burns, as a cause, shows the largest increase, falls are second, drowning third, and automobiles fourth, contrary to the general belief that they are the greatest accident menace of the day. Railroads came fifth and there was a slight decrease in the number of deaths from all other types of accidents combined.

Suicides as a cause are not shown in the above, although an external cause of death. There were, however, 285 during the year, 207 being males and 78 females. The largest number in any one age group was 27 males, 50-54 years, and 14 females, 25-29 years.

Table 1—General Summary of Births, Deaths and Marriages in Ontario by County Municipalities (including Cities and Towns), 1928.

COUNTIES	Estimated population	BIRTHS (exclusive of still-births)			Ratio per 1,000 of population	DEATHS									Ratio per 1,000 of population	Still-births	Marriages	Ratio per 1,000 of population
						All ages			Under 1 year		1-4 years		5 years and over					
		Total	M	F		Total	M	F	M	F	M	F	M	F				
Total	**3,229,000**	**68,510**	**35,299**	**33,211**	**21.2**	**37,128**	**19,457**	**17,671**	**2,735**	**2,145**	**700**	**607**	**16,022**	**14,919**	**11.5**	**2,793**	**25,728**	**8.0**
Addington	7391	143	81	62	19.3	80	40	40	7	3	1	1	32	36	10.8	5	41	5.5
Algoma	48753	1063	564	499	21.8	430	257	173	49	25	15	13	193	135	8.8	55	414	8.4
Brant	54286	1027	523	504	18.9	652	326	326	36	23	2	12	288	291	12.0	57	399	7.3
Bruce	45098	810	418	392	17.9	532	281	251	23	20	5	7	253	224	11.7	27	252	5.5
Carleton	167325	3719	1941	1778	22.2	1999	1035	964	226	167	51	48	758	749	11.9	145	1114	6.6
Cochrane	30924	1687	879	808	54.5	523	321	202	104	89	23	21	194	92	16.9	50	389	12.5
Dufferin	15389	257	148	109	16.7	187	111	76	9	5	2	1	100	70	12.1	14	84	5.4
Dundas	18139	306	143	163	16.8	191	98	93	11	7	3	1	84	85	10.5	11	84	4.6
Durham	25213	440	225	215	17.4	309	160	149	19	18	...	1	141	130	12.2	17	135	5.3
Elgin	47132	731	364	367	15.5	537	284	253	19	13	11	6	254	234	11.3	27	315	6.6
Essex	133653	3910	2042	1868	29.2	1470	778	692	137	120	39	40	602	532	11.0	140	1553	11.6
Frontenac	45428	919	469	450	20.2	666	342	324	33	31	12	16	297	277	14.6	36	326	7.1
Glengarry	21469	427	217	210	19.8	224	116	108	20	14	5	3	91	91	10.4	10	85	3.9
Grenville	16995	229	102	127	13.4	187	95	92	5	8	4	1	86	83	11.0	8	97	5.7
Grey	60142	1159	560	599	19.2	660	357	303	37	33	3	5	317	265	10.9	51	420	6.9
Haldimand	22259	371	180	191	16.6	283	146	137	16	13	5	3	125	121	12.7	9	141	6.3
Haliburton	6529	173	84	89	26.4	66	47	19	8	4	4	1	35	14	10.0	9	34	5.2
Halton	26000	344	160	184	13.2	247	118	129	13	17	5	2	100	110	9.4	18	163	6.2
Hastings	55119	1295	690	605	23.4	758	378	380	50	47	10	8	318	325	13.7	59	433	7.8
Huron	47777	755	401	354	15.8	592	318	274	21	14	6	5	291	255	12.3	35	276	5.6
Kenora	22748	508	271	237	22.3	203	113	90	13	15	8	12	92	63	8.9	17	100	4.3
Kent	63337	1399	722	677	22.0	746	396	350	46	47	13	14	337	289	11.7	55	444	7.0
Lambton	55928	998	504	494	17.8	608	316	292	32	35	10	14	274	243	10.8	41	296	5.2
Lanark	33889	607	318	289	17.9	399	200	199	24	20	4	4	172	175	11.7	29	194	5.7
Leeds	34943	608	305	303	17.4	523	261	262	27	18	2	6	232	238	14.9	24	201	5.7
Lennox	12144	174	88	86	14.3	129	65	64	5	5	1	...	59	59	10.6	6	68	5.6
Lincoln	56007	967	515	452	17.2	616	315	301	38	27	11	8	266	266	10.9	28	374	6.6
Manitoulin	10518	273	127	146	25.9	112	57	55	9	5	2	3	46	47	10.6	7	57	5.4
Middlesex	114718	2002	1018	984	17.4	1690	831	859	69	44	19	22	743	793	14.0	88	899	7.8
Muskoka	19910	433	202	231	21.3	264	152	112	21	7	4	3	127	102	13.2	21	128	6.4
Nipissing	39648	1220	623	597	30.7	346	188	158	53	52	4	7	131	99	8.7	47	299	7.5
Norfolk	25527	560	287	273	21.9	368	201	167	12	20	3	4	186	143	14.4	19	174	6.8
Northumberland	32099	519	274	245	16.1	412	197	215	21	15	8	2	168	198	12.8	22	201	6.2
Ontario	51537	1260	639	621	24.4	676	350	326	52	35	8	9	290	282	13.1	46	446	8.6
Oxford	51006	776	380	396	15.2	605	308	297	33	20	8	8	267	269	11.7	34	295	5.7
Parry Sound	28372	593	285	308	20.9	230	137	93	21	14	8	5	108	74	8.1	24	142	5.0
Peel	19828	418	228	190	21.0	269	139	130	16	12	5	4	118	114	13.5	17	162	8.1
Perth	47711	972	511	461	20.3	534	279	255	21	14	9	1	249	240	11.1	47	327	6.8
Peterborough	44244	811	413	398	18.3	492	254	238	29	18	4	4	221	216	11.3	51	330	7.4
Prescott	27599	731	394	337	26.4	314	156	158	50	47	6	6	100	105	11.3	20	180	6.5
Prince Edward	17538	270	135	135	15.4	231	124	107	9	3	1	2	114	102	13.1	17	97	5.5
Rainy River	13617	420	218	202	30.8	155	101	54	17	9	4	1	80	44	11.3	11	73	5.1
Renfrew	55169	1243	647	596	22.5	586	306	280	51	49	13	12	242	219	10.6	60	335	6.0
Russell	22271	596	302	294	26.7	209	97	112	27	30	6	6	64	76	9.3	20	107	4.8
Simcoe	87016	1637	855	782	18.8	1054	557	497	53	50	15	13	489	434	12.1	96	476	5.4
Stormont	29065	922	477	445	31.7	524	279	245	65	37	23	14	191	194	18.0	34	256	8.8
Sudbury	47395	1479	773	706	31.2	513	323	190	83	66	35	18	205	106	10.8	55	293	6.1
Thunder Bay	57369	1402	708	694	24.4	527	314	213	62	36	13	8	239	169	9.3	59	513	8.9
Timiskaming	31233	896	422	474	28.6	283	165	118	34	32	14	13	117	73	9.0	33	256	8.1
Victoria	27773	473	244	229	17.0	303	176	127	17	9	3	2	156	116	10.9	27	146	5.2
Waterloo	134986	1767	912	855	13.0	860	461	399	55	29	10	9	396	361	6.3	70	713	5.2
Welland	68630	1642	874	768	23.9	830	486	344	80	52	12	11	394	281	12.0	71	700	10.1
Wellington	57701	1098	551	547	19.0	741	390	351	27	34	12	4	351	313	12.8	38	406	7.0
Wentworth	168763	3436	1809	1627	20.5	1914	1000	914	125	92	28	27	847	795	11.3	148	1495	8.8
York	723740	15635	8077	7558	21.6	8269	4155	4114	595	476	168	136	3392	3502	11.4	628	7790	10.7

Table 1A—Number of Births, Deaths and Marriages, and the ratio per 1,000 of population in each county (excluding cities and towns of 5,000 population and over), Ontario, 1928

Counties	Estimated population	Births exclud'g still-births	Ratio per 1,000	Deaths exclud'g still-births	Ratio per 1,000	Marriages	Ratio per 1,000
Total including all municipalities	3,229,000	68,510	21.2	37,128	11.5	25,728	8.0
Total, excluding cities and towns of 5,000 and over	1,679,324	30,969	18.4	17,028	10.1	8,374	5.0
Addington	7,391	143	19.3	80	10.8	41	5.5
Algoma	26,577	436	16.4	202	7.6	138	5.2
Brant	25,383	316	12.4	249	9.8	90	3.5
Bruce	45,098	810	17.9	532	11.7	252	5.5
Carleton	40,795	531	13.0	279	6.8	119	2.6
Cochrane	19,069	1,255	65.8	345	18.0	242	12.6
Dufferin	15,389	257	16.7	187	12.1	84	5.4
Dundas	18,139	306	16.8	191	10.5	84	4.6
Durham	25,213	440	17.4	309	12.2	135	5.3
Elgin	30,389	390	12.8	323	10.6	156	5.4
Essex	37,949	1,364	35.9	514	13.5	315	8.3
Frontenac	24,063	343	14.2	221	9.2	96	3.9
Glengarry	21,469	427	19.8	224	10.4	85	3.9
Grenville	16,995	229	13.4	187	11.0	97	5.7
Grey	47,774	791	16.5	488	10.2	298	6.2
Haldimand	22,259	371	16.6	283	12.7	141	6.3
Haliburton	6,529	173	26.4	66	10.1	34	5.2
Halton	26,000	344	13.2	247	9.1	163	6.2
Hastings	36,301	811	22.3	446	12.3	214	5.8
Huron	47,777	755	15.8	592	12.4	276	5.7
Kenora	15,040	292	19.4	131	8.7	55	3.6
Kent	47,828	905	18.7	440	9.2	255	5.3
Lambton	39,384	572	14.5	392	9.9	162	4.1
Lanark	26,784	441	16.4	290	10.8	146	5.4
Leeds	25,621	391	15.2	352	13.7	120	4.7
Lennox	12,144	174	14.3	129	10.6	68	5.6
Lincoln	32,680	397	12.1	285	8.7	115	3.5
Manitoulin	10,518	273	25.0	112	10.6	57	5.4
Middlesex	48,586	564	11.6	568	11.7	188	3.8
Muskoka	19,910	433	21.7	264	13.2	128	6.4
Nipissing	24,965	785	31.4	217	8.7	140	5.6
Norfolk	25,527	560	21.9	368	14.4	174	6.8
Northumberland	26,721	398	14.8	299	11.2	142	5.3
Ontario	25,733	504	19.5	318	12.3	148	5.7
Oxford	35,661	450	12.6	343	9.6	140	3.9
Parry Sound	28,372	593	20.9	230	8.1	142	5.0
Peel	14,728	283	19.2	189	12.8	107	7.2
Perth	29,503	571	19.3	335	11.3	195	6.6
Peterborough	22,476	253	11.2	187	8.3	93	4.1
Prescott	22,232	537	23.7	237	10.6	146	6.5
Prince Edward	17,538	270	15.3	231	13.1	97	5.5
Rainy River	8,312	231	27.7	88	10.5	23	2.7
Renfrew	40,896	803	19.6	325	7.9	218	5.3
Russell	22,271	596	22.2	209	9.3	107	4.8
Simcoe	58,293	906	15.5	611	10.4	229	3.7
Stormont	18,736	434	23.2	252	13.4	56	2.9
Sudbury	37,094	1,026	27.6	313	8.4	139	3.7
Thunder Bay	15,520	180	11.6	94	6.0	18	1.1
Timiskaming	31,233	896	28.6	283	9.0	256	8.1
Victoria	20,542	295	14.3	188	9.1	71	3.4
Waterloo	82,144	521	6.3	285	3.4	163	1.9
Welland	34,329	781	22.7	403	11.7	239	6.9
Wellington	38,499	736	19.1	500	12.9	192	4.9
Wentworth	36,307	367	10.1	381	10.4	132	3.6
York	142,638	3,059	21.4	1,214	8.5	653	4.5

Table 2—General Summary of Births, Deaths and Marriage in Ontario for Cities, 1928

CITIES	Population	BIRTHS (exclusive of still-births)			Ratio per 1,000	DEATHS									Ratio per 1,000	Still-births	Marriages	Ratio per 1,000
						All ages			Under 1 year		1-4 years		5 years and over					
		Total	M	F		Total	M	F	M	F	M	F	M	F				
Cities	**1,336,421**	**31,602**	**16,333**	**15,269**	**23.6**	**16,999**	**8,693**	**8,306**	**1,288**	**974**	**339**	**286**	**7,066**	**7,046**	**12.7**	**1,384**	**15,242**	**11.4**
Belleville	13018	371	208	163	28.4	239	112	127	13	16	4	5	95	106	18.3	25	163	12.5
Brantford	28903	711	366	345	24.6	403	188	215	25	20	2	7	161	188	13.9	36	309	10.6
Chatham	15509	494	269	225	31.8	306	173	133	21	19	4	4	148	110	19.7	25	189	12.2
Fort William	23544	664	323	341	28.2	211	125	86	33	19	5	2	87	65	8.9	28	255	10.8
Galt	12977	266	149	117	20.5	181	100	81	14	4	2	2	84	75	13.9	13	104	8.0
Guelph	19202	362	182	180	18.8	241	122	119	8	19	6	3	108	97	12.5	17	214	11.1
Hamilton	127447	3007	1584	1423	23.6	1471	765	706	112	78	28	23	625	605	11.5	128	1327	10.4
Kingston	21365	576	286	290	26.9	445	214	231	22	22	7	12	185	197	20.8	24	230	10.7
Kitchener	26709	751	393	358	28.1	293	146	147	22	13	5	2	119	132	10.9	30	319	11.9
London	66132	1438	720	718	21.7	1122	549	573	49	27	13	15	487	531	16.9	72	711	10.7
Niagara Falls	19013	445	231	214	23.4	220	125	95	18	16	2	2	105	77	11.5	26	247	12.9
North Bay	14683	435	212	223	29.6	129	74	55	14	15	...	2	60	38	8.7	13	159	10.8
Oshawa	20609	703	357	346	34.1	227	117	110	31	17	5	4	81	89	11.0	26	267	12.9
Ottawa	120799	3003	1549	1454	24.8	1645	853	792	186	134	40	38	627	620	13.6	131	962	7.9
Owen Sound	12368	368	169	199	29.7	172	96	76	8	10	2	...	86	66	13.9	15	122	9.8
Peterborough	21768	558	288	270	25.6	305	157	148	18	12	2	2	137	134	14.0	38	237	10.8
Port Arthur	18305	558	295	263	30.4	222	132	90	25	10	4	3	103	77	12.1	29	240	13.1
St. Catharines	23327	570	291	279	24.4	331	170	161	32	18	6	3	132	140	14.1	18	259	11.1
St. Thomas	16743	341	160	181	20.3	214	102	112	9	3	9	4	84	105	12.7	16	159	9.4
Sarnia	16544	426	200	226	25.7	216	110	106	9	21	7	6	94	79	13.0	21	134	8.1
Sault Ste. Marie	22176	627	331	296	28.2	228	130	98	25	13	9	3	96	82	10.2	31	276	12.4
Stratford	18208	401	216	185	22.0	199	103	96	8	11	5	...	90	85	10.9	18	132	7.2
Toronto	569899	12342	6394	5948	21.6	6962	3497	3465	498	397	148	116	2851	2952	12.2	504	7058	12.3
Welland	10085	279	152	127	27.6	155	92	63	16	10	3	...	73	53	15.3	14	168	16.6
Windsor	66893	1681	895	786	25.1	689	355	334	62	46	20	26	273	262	10.2	74	896	13.3
Woodstock	10195	225	113	112	22.0	173	86	87	10	4	1	2	75	81	16.9	12	105	10.3

Table 2A—General Summary of Births, Deaths and Marriages for Towns of 5,000 population and over, Ontario, 1928

TOWNS 5000 population and over	Population	BIRTHS (exclusive of still-births)			Ratio per 1,000	DEATHS									Ratio per 1,000	Still-births	Marriages	Ratio per 1,000
						All ages			Under 1 year		1-4 years		5 years and over					
		Total	M	F		Total	M	F	M	F	M	F	M	F				
Total	**213,255**	**5,939**	**3,108**	**2,831**	**27.8**	**3,101**	**1,660**	**1,441**	**275**	**227**	**74**	**58**	**1,311**	**1,156**	**14.5**	**263**	**2,112**	**9.9**
Barrie	7365	169	92	77	22.9	120	57	63	5	5	2	1	50	57	16.2	13	66	8.9
Brampton	5100	135	74	61	26.4	80	41	39	4	4	1	1	36	34	15.6	8	55	10.7
Brockville	9322	217	109	108	23.2	171	89	82	11	6	1	3	77	73	18.3	10	81	8.6
Cobourg	5378	121	70	51	22.5	113	47	66	5	2	3	1	39	63	21.0	4	59	10.9
Collingwood	5652	95	52	43	16.8	77	42	35	3	2	1	1	38	32	13.6	3	52	9.2
Cornwall	10329	488	262	226	47.2	272	145	127	38	19	9	7	98	101	26.3	20	200	19.3
Dundas	5009	62	36	26	12.3	62	28	34	1	2	...	...	27	32	12.3	6	36	7.1
Eastview	5731	185	101	84	32.3	75	41	34	18	15	5	5	18	14	13.0	7	33	5.7
Ford City	13531	347	183	164	25.6	67	33	34	11	14	7	2	15	18	4.9	6	117	8.6
Fort Frances	5305	189	94	95	35.6	67	48	19	9	3	2	...	37	16	12.6	5	50	9.4
Hawkesbury	5367	194	103	91	36.1	77	45	32	14	8	1	3	30	21	12.4	2	34	6.3
Ingersoll	5150	101	47	54	19.6	89	33	56	6	3	1	1	26	52	15.3	7	50	9.7
Kenora	7708	216	119	97	28.0	72	40	32	7	6	1	4	32	22	9.3	9	45	5.8
Leamington	5072	93	46	47	18.3	54	31	23	2	1	...	...	29	22	10.6	4	69	13.6
Lindsay	7231	178	91	87	24.6	115	71	44	6	4	...	1	65	39	15.8	11	75	10.3
Midland	7820	223	111	112	28.5	111	57	54	9	14	1	...	47	40	14.0	12	39	4.9
Mimico	5876	129	69	60	21.9	66	27	39	2	4	...	2	25	33	11.2	4	50	8.5
New Toronto	5327	105	54	51	19.7	27	13	14	4	5	...	...	9	9	5.0	8	29	5.4
Orillia	7886	244	130	114	30.9	135	73	62	3	4	...	1	70	57	17.1	15	90	11.4
Pembroke	9056	292	150	142	32.2	182	92	90	11	17	5	3	76	70	20.0	25	89	9.8
Port Colborne	5203	137	74	63	26.3	52	26	26	8	5	...	...	18	21	9.9	1	46	8.8
Preston	5697	113	58	55	19.8	53	31	22	6	2	...	1	25	19	9.3	7	64	11.2
Renfrew	5217	148	69	79	28.3	79	33	46	6	8	1	5	26	33	13.2	7	28	5.3
Smith's Falls	7105	166	87	79	23.3	109	55	54	6	5	2	2	47	47	15.3	7	48	6.7
Sudbury	10301	453	249	204	43.9	200	139	61	34	19	17	3	88	39	19.4	23	154	14.9
Timmins	11855	432	230	202	36.4	178	114	64	23	34	9	7	82	23	15.0	13	147	12.4
Trenton	5800	113	55	58	19.4	73	36	37	7	3	2	1	27	33	12.6	6	56	9.6
*Walkerville	10208	425	205	220	41.6	146	79	67	12	13	3	1	64	53	14.3	15	156	15.2
Waterloo	7459	116	58	58	15.5	48	27	21	3	...	...	1	24	20	6.4	2	63	8.4
Whitby	5195	53	30	23	10.2	131	67	64	1	...	...	1	66	63	25.2	3	31	5.9

*The increase in births over last year is due to the opening of the new General Hospital.

Table 2B—General Summary of Births, Deaths and Marriages in Ontario, for towns of 1,000 population and under 5,000, 1928

TOWNS 1,000 and over and under 5,000	Estimated Population	BIRTHS (exclusive of still-births)			ratio per 1000	DEATHS										ratio per 1000	Still-births	Marriages	Ratio per 1000
						All ages			Under 1 year		1-4 years		5 years and over						
		Total	M	F		Total	M	F	M	F	M	F	M	F					
Towns	237201	5825	2896	2929	24.5	3370	1765	1605	223	182	51	40	1491	1383	14.2	230	2414	10.1
Alexandria	2284	61	29	32	26.7	35	19	16	7	6	2	....	10	10	15.3	2	24	10.5
Alliston	1329	34	16	18	25.5	34	17	17	1	1	....	1	16	15	25.5	.....	11	8.3
Almonte	2376	81	44	37	34.0	24	11	13	1	1	....	....	10	12	10.1	5	17	7.1
Amherstburg	3017	47	23	24	15.6	42	17	25	...	3	....	1	17	21	13.9	7	28	9.3
Arnprior	4033	107	58	49	26.5	47	24	23	2	1	1	....	21	22	11.7	3	54	13.4
Aurora	2596	29	15	14	11.2	31	15	16	...	1	....	....	15	15	11.9	1	29	11.2
Aylmer	2050	30	18	12	14.6	33	17	16	...	....	....	....	17	16	16.1	.....	40	19.5
Blenheim	1595	35	18	17	21.9	25	10	15	1	1	....	2	9	12	15.7	1	29	18.2
Blind River	2335	107	55	52	44.8	49	31	18	8	5	1	2	22	11	21.0	12	27	11.6
Bowmanville	3630	112	54	58	30.8	51	28	23	4	4	....	....	24	19	14.0	6	35	9.6
Bracebridge	2449	79	40	39	32.2	32	12	20	...	3	1	....	11	17	13.0	2	41	16.7
Bridgeburg	3349	65	37	28	19.4	25	16	9	4	...	....	....	12	9	7.5	6	47	14.0
Burlington	3389	20	10	10	5.9	26	10	16	1	...	1	....	8	16	7.7	2	30	8.9
Campbellford	2749	50	20	30	18.2	43	26	17	2	1	1	....	23	16	15.5	1	20	7.3
Capreol	1522	68	21	47	44.6	17	8	9	2	5	3	....	3	4	11.2	3	14	9.2
Carleton Place	4293	68	31	37	16.2	55	24	31	2	3	....	....	22	28	13.1	4	41	9.8
Chesley	1801	30	17	13	16.6	24	11	13	...	....	....	1	11	12	13.3	.....	20	11.1
Clinton	1936	46	28	18	23.8	45	26	19	...	....	....	....	26	19	23.3	3	17	8.8
Cobalt	4203	103	45	58	24.5	50	28	22	7	6	2	2	19	14	11.9	1	34	8.1
Cochrane	2958	134	65	69	45.2	68	35	33	10	7	1	5	24	21	23.0	4	47	15.9
Copper Cliff	2645	68	34	34	25.7	27	17	10	3	2	1	1	13	7	10.2	1	21	7.9
Deseronto	1380	22	8	14	15.9	23	12	11	1	2	....	....	11	9	16.7	.....	8	5.8
Dresden	1424	24	10	14	16.8	13	8	5	2	1	....	1	6	3	9.1	.....	22	15.4
Dryden	1263	78	44	34	61.7	25	16	9	...	1	....	....	16	8	19.8	2	19	15.0
Dunnville	3386	102	47	55	30.2	63	31	32	3	7	1	....	27	25	18.6	4	39	11.5
Durham	1720	41	21	20	23.8	22	10	12	1	1	....	....	9	11	12.8	2	21	12.2
Elmira	2692	33	14	19	12.3	16	6	10	...	1	....	1	6	8	5.9	.....	19	7.1
Essex	1821	30	16	14	16.5	21	11	10	1	2	....	1	10	7	11.5	1	24	13.2
Forest	1415	11	6	5	7.8	25	13	12	...	1	....	....	13	11	18.0	2	21	15.5
Gananoque	3497	71	33	38	20.6	39	22	17	5	2	....	....	17	15	11.2	1	40	11.4
Georgetown	1973	35	18	17	17.8	17	13	4	3	...	....	....	10	4	8.6	.....	19	9.6
Goderich	4264	76	39	37	17.8	57	31	26	1	...	....	1	30	25	13.4	3	30	7.0
Gravenhurst	1846	40	15	25	21.7	26	19	7	2	...	....	....	17	7	14.6	.....	9	4.9
Grimsby	1976	45	27	18	22.8	25	14	11	1	1	....	....	13	10	12.6	.....	18	9.1
Haileybury	2859	70	32	38	24.5	32	21	11	6	5	2	....	13	6	11.2	1	28	9.8
Hanover	2785	58	34	24	20.8	32	14	18	5	3	....	....	9	15	11.5	2	37	13.3
Harriston	1145	14	8	6	12.2	15	5	10	...	....	....	....	5	10	13.1	.....	12	10.5
Hespeler	2748	35	16	19	12.7	21	8	13	...	1	....	....	8	12	7.6	2	44	16.0
Huntsville	2670	79	35	44	29.6	30	16	14	4	1	....	....	12	13	11.2	4	35	13.1
Iroquois Falls	1426	61	30	31	42.8	14	12	2	3	1	....	....	9	1	9.8	.....	29	20.3
Keewatin	1368	20	10	10	14.7	4	3	1	...	....	1	....	2	1	2.9	.....	5	3.7
Kincardine	2131	96	44	52	45.0	46	26	20	4	4	....	....	22	16	21.6	4	18	8.4
Kingsville	2427	50	25	25	20.6	33	19	14	1	2	2	....	16	12	13.6	1	30	12.4
Listowel	2346	56	25	31	23.9	40	18	22	...	....	1	1	17	21	17.1	6	30	12.8
Mattawa	1650	71	36	35	42.0	28	16	12	2	3	1	1	13	8	17.0	4	19	11.5
Meaford	2747	43	20	23	24.6	41	18	23	3	....	....	....	15	23	23.5	1	33	18.9
Merritton	2556	37	23	14	14.5	9	3	6	...	....	....	....	3	6	3.5	.....	6	2.3
Milton	1875	19	10	9	10.1	24	9	15	1	1	....	....	8	14	12.8	1	21	11.2
Mitchell	1574	24	10	14	15.2	29	13	16	1	...	....	....	12	16	18.4	1	20	12.7
Mount Forest	1911	42	26	16	22.0	36	18	18	1	...	....	....	17	18	18.8	.....	27	14.1
Napanee	2983	28	13	15	9.4	40	18	22	2	1	....	....	16	21	13.4	.....	41	13.7
New Liskeard	2624	136	62	74	53.8	25	11	14	5	3	....	....	6	11	9.9	1	38	15.0
Newmarket	3314	100	55	54	32.9	66	38	28	1	2	....	....	37	26	19.9	1	50	15.1
Niagara	1605	12	6	6	6.3	17	5	12	1	...	....	....	4	12	8.9	1	10	5.2
Oakville	3320	42	18	24	12.6	34	14	20	1	3	1	....	12	17	10.2	1	28	8.4
Orangeville	2679	58	30	28	21.6	52	26	26	3	3	1	1	22	22	19.4	4	23	8.6
Palmerston	1650	33	11	22	20.0	26	15	11	1	...	....	....	14	11	15.8	.....	9	5.5
Paris	4063	89	47	42	21.9	56	32	24	3	...	....	....	29	24	13.8	1	23	5.7
Parry Sound	3254	129	65	64	39.7	57	39	18	3	2	....	1	36	15	17.5	5	51	15.7
Penetanguishene	3985	132	74	58	33.1	61	30	31	5	2	3	2	22	27	15.3	15	26	6.5
Perth	3712	81	42	39	21.8	54	28	26	3	4	1	....	24	22	13.2	5	28	7.5
Petrolia	2516	68	31	37	27.0	65	36	29	5	....	....	1	31	28	25.8	4	18	7.2
Picton	3266	87	42	45	26.6	76	43	33	3	....	....	....	40	33	23.3	4	36	11.0
Port Hope	4468	102	52	50	22.8	74	35	39	3	3	....	....	32	36	16.6	2	35	7.8
Prescott	2724	40	15	25	14.7	37	15	22	1	2	2	....	12	20	13.6	1	37	13.6
Rainy River	1570	47	23	24	29.9	12	9	3	1	...	....	....	8	3	7.6	1	12	7.6
Ridgetown	1986	36	14	22	18.1	36	22	14	2	...	1	1	19	13	18.1	1	22	11.1
Riverside	4383	91	46	45	20.8	14	7	7	1	3	1	2	5	2	3.2	4	13	3.0
Rockland	2776	89	49	40	32.0	40	16	24	5	6	1	1	10	17	14.4	3	24	8.6
St. Mary's	4023	67	36	31	16.6	40	20	20	3	...	1	....	16	20	9.9	6	30	7.4
Sandwich	10258	218	118	100	21.3	81	48	33	12	9	1	3	35	21	7.9	4	63	6.1
Seaforth	1670	33	19	14	19.8	21	14	7	...	....	....	....	14	7	12.6	4	10	6.0
Simcoe	4581	187	97	90	40.8	80	42	38	4	7	....	1	38	30	17.5	7	58	12.7
Sioux Lookout	1702	63	31	32	37.0	32	19	13	2	6	1	1	16	6	18.8	3	21	12.3
Southampton	1691	34	20	14	20.1	18	9	9	3	...	....	....	6	9	10.6	1	14	8.3
Strathroy	2702	83	33	50	30.7	76	39	37	2	1	....	1	37	35	28.1	6	24	8.9
Sturgeon Falls	4647	194	97	97	41.7	40	23	17	11	9	1	1	11	7	28.6	6	35	7.5
Thessalon	1610	45	22	23	28.0	17	9	8	2	1	1	1	6	6	10.6	1	19	11.8
Thorold	4935	114	65	49	21.5	44	31	13	4	4	3	....	24	9	9.1	3	51	10.6
Tilbury	1992	40	16	24	20.0	26	10	16	1	1	2	....	7	15	13.0	3	40	20.0
Tillsonburg	3257	92	47	45	18.2	64	39	25	4	5	1	....	34	20	19.6	3	29	8.9
Uxbridge	1417	23	10	13	16.2	16	6	10	1	1	....	....	5	9	11.3	2	13	9.2
Vankleek Hill	1523	49	27	22	32.2	30	12	18	3	2	1	....	8	16	19.7	1	23	15.1
Walkerton	2357	74	37	37	31.4	49	26	23	2	1	....	....	24	22	20.8	7	18	7.6
Wallaceburg	4234	108	55	53	26.7	38	22	16	4	3	2	....	16	13	9.4	7	34	8.4
Weston	4190	65	26	39	15.5	179	82	97	6	3	2	1	74	93	4.3	3	45	10.7
Wiarton	1854	60	30	30	32.3	22	11	11	1	1	1	1	9	9	11.8	2	14	7.5
Wingham	2266	52	23	29	22.9	41	22	19	2	2	1	....	19	17	18.1	1	22	9.7

Table 3—Births (exclusive of Still-births) by Months, Classified as Rural and Urban for Ontario by Counties—1928

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ontario	68510	5608	5508	6070	5734	6144	5989	5936	5921	5644	5495	5101	5360
Rural	25144	2004	2035	2265	2207	2262	2242	2181	2158	2084	2051	1799	1856
Urban	43366	3604	3473	3805	3527	3882	3747	3755	3763	3560	3444	3302	3504
Addington	143	13	14	10	16	18	14	9	11	9	14	9	6
Rural	143	13	14	10	16	18	14	9	11	9	14	9	6
Algoma	1063	81	80	103	100	103	96	90	93	72	76	79	90
Rural	284	20	15	39	26	28	31	24	23	21	20	16	21
Urban	779	61	65	64	74	75	65	66	70	51	56	63	69
Sault Ste. Marie, c	627	51	49	55	63	65	48	48	55	42	47	53	51
Blind River, t	107	7	10	6	9	8	12	13	12	5	4	7	14
Thessalon, t	45	3	6	3	2	2	5	5	3	4	5	3	4
Brant	1027	100	92	88	86	85	85	88	84	77	91	60	91
Rural	227	22	11	25	28	18	18	13	18	15	31	16	12
Urban	800	78	81	63	58	67	67	75	66	62	60	44	79
Brantford, c	711	73	67	58	53	60	60	64	58	54	53	40	71
Paris, t	89	5	14	5	5	7	7	11	8	8	7	4	8
Bruce	810	62	63	74	80	77	75	78	70	68	77	46	40
Rural	516	47	39	55	58	51	43	46	42	35	45	29	26
Urban	294	15	24	19	22	26	32	32	28	33	32	17	14
Chesley, t	30	2	3	2	3	2	1	3	2	1	5	3	3
Kincardine, t	96	5	5	5	4	9	12	12	11	15	9	4	5
Southampton, t	34	3	3	3	2	3	4	2	5	3	3	1	2
Walkerton, t	74	2	5	6	10	6	8	10	7	6	9	3	2
Wiarton, t	60	3	8	3	3	6	7	5	3	8	6	6	2
Carleton	3719	332	288	314	334	346	325	314	328	305	257	287	289
Rural	531	46	30	42	60	48	47	55	42	49	41	39	32
Urban	3188	286	258	272	274	298	278	259	286	256	216	248	257
Ottawa, c	3003	279	236	259	259	283	267	241	269	239	198	228	245
Eastview, t	185	7	22	13	15	15	11	18	17	17	18	20	12
Cochrane	1687	134	134	144	139	143	166	156	142	139	131	124	135
Rural	1060	85	88	99	77	94	95	101	80	81	91	79	90
Urban	627	49	46	45	62	49	71	55	62	58	40	45	45
Cochrane, t	134	7	11	11	12	9	17	6	16	22	10	7	6
Iroquois Falls, t	61	7	6	3	7	7	1	7	10	4	3	4	2
Timmins, t	432	35	29	31	43	33	53	42	36	32	27	34	37
Dufferin	257	16	21	21	29	18	24	17	29	19	23	25	15
Rural	199	11	17	16	24	12	21	15	24	13	15	18	13
Urban	58	5	4	5	5	6	3	2	5	6	8	7	2
Orangeville, t	58	5	4	5	5	6	3	2	5	6	8	7	2
Dundas	306	24	24	32	24	34	19	23	25	24	28	28	21
Rural	306	24	24	32	24	24	19	23	25	24	28	28	21
Durham	440	28	37	34	40	40	33	44	40	35	32	38	39
Rural	226	11	17	17	22	23	20	22	22	17	16	19	20
Urban	214	17	20	17	18	17	13	22	18	18	16	19	19
Bowmanville, t	112	7	9	8	12	12	8	10	11	9	4	11	11
Port Hope, t	102	10	11	9	6	5	5	12	7	9	12	8	8
Elgin	731	58	56	81	56	48	59	80	61	60	59	53	60
Rural	360	37	34	34	25	25	39	33	25	29	29	24	26
Urban	371	21	22	47	31	23	20	47	36	31	30	29	34
St. Thomas, c	341	20	20	42	28	20	19	45	33	29	26	27	32
Aylmer, t	30	1	2	5	3	3	1	2	3	2	4	2	2
Essex	3910	327	337	359	292	337	313	323	347	323	322	302	328
Rural	928	77	90	89	66	79	70	84	85	77	65	65	81
Urban	2982	250	247	270	226	258	243	239	262	246	257	237	247
Windsor, c	1681	173	163	153	141	140	126	133	139	132	139	109	133
Amherstburg, t	47	3	7	3	1	6	3	5	2	4	6	3	4
Essex, t	30	3	6	2	1	.....	2	1	1	3	2	6	3
Ford City, t	347	25	27	42	23	25	32	27	28	29	33	26	30
Kingsville, t	50	6	7	5	5	9	5	1	4	2	.....	3	3
Leamington, t	93	5	2	11	9	6	10	2	13	4	15	10	6
Riverside, t	91	5	9	7	10	8	5	9	9	6	9	8	6
Sandwich, t	218	16	18	25	17	18	17	18	14	18	14	26	17
Walkerville, t	425	14	8	22	19	46	43	43	52	48	39	46	45
Frontenac	919	89	67	65	65	82	78	101	74	95	65	67	71
Rural	343	30	24	25	21	36	25	36	32	41	25	23	25
Urban	576	59	43	40	44	46	53	65	42	54	40	44	46
Kingston, c	576	59	43	40	44	46	53	65	42	54	40	44	46
Glengarry	427	29	39	61	35	38	32	42	28	31	29	31	32
Rural	366	24	38	52	33	32	28	37	25	23	22	25	27
Urban	61	5	1	9	2	6	4	5	3	8	7	6	5
Alexandria, t	61	5	1	9	2	6	4	5	3	8	7	6	5
Grenville	229	14	25	16	14	21	15	19	23	34	13	15	20
Rural	189	12	19	14	12	17	12	15	23	27	10	12	16
Urban	40	2	6	2	2	4	3	4	.....	7	3	3	4
Prescott, t	40	2	6	2	2	4	3	4	.....	7	3	3	4
Grey	1159	100	95	95	99	119	101	97	107	91	85	82	88
Rural	649	63	52	52	49	67	58	57	59	55	48	44	45
Urban	510	37	43	43	50	52	43	40	48	36	37	38	43
Owen Sound, c	368	29	35	35	37	25	32	26	34	26	33	26	30
Durham, t	41	2	3	2	5	11	4	3	4	1	1	1	4
Hanover, t	58	5	1	3	4	7	2	9	6	6	3	9	3
Meaford, t	43	1	4	3	4	9	5	2	4	3	.....	2	6

Table 3—Births (exclusive of Still-births) by Months, Classified as Rural and Urban, for Ontario by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Haldimand	371	33	39	25	36	39	34	33	28	28	24	29	23
Rural	269	26	27	19	26	27	26	22	23	24	20	13	16
Urban	102	7	12	6	10	12	8	11	5	4	4	16	7
Dunnville, t	102	7	12	6	10	12	8	11	5	4	4	16	7
Haliburton	173	13	14	14	18	18	10	19	12	15	14	12	14
Rural	173	13	14	14	18	18	10	19	12	15	14	12	14
Halton	344	36	33	34	32	30	37	17	22	31	31	19	22
Rural	228	29	19	26	23	22	23	10	13	15	22	13	13
Urban	116	7	14	8	9	8	14	7	9	16	9	6	9
Burlington, t	20	1	2	2	.....	3	1	.....	.....	4	5	1	1
Georgetown, t	35	2	4	3	2	2	7	4	2	4	1	2	2
Milton, t	19	1	2	1	3	1	.....	2	3	1	2	1	2
Oakville, t	42	3	6	2	4	2	6	1	4	7	1	2	4
Hastings	1295	87	91	109	123	120	114	115	133	98	122	106	77
Rural	789	40	60	61	89	75	74	62	72	64	78	63	51
Urban	506	47	31	48	34	45	40	53	61	34	44	43	26
Belleville, c	371	32	22	39	23	34	33	38	42	23	31	34	20
Deseronto, t	22	6	2	1	3	.....	.....	.....	2	2	1	4	1
Trenton, t	113	9	7	8	8	11	7	15	17	9	12	5	5
Huron	755	48	59	57	65	69	82	69	76	60	54	50	66
Rural	548	35	46	44	48	52	53	52	53	41	40	35	49
Urban	207	13	13	13	17	17	29	17	23	19	14	15	17
Clinton, t	46	3	3	4	7	1	10	5	2	3	2	2	4
Goderich, t	76	6	4	5	5	6	6	4	13	8	5	6	8
Seaforth, t	33	2	1	1	1	6	3	5	4	1	4	4	1
Wingham, t	52	2	5	3	4	4	10	3	4	7	3	3	4
Kenora	508	46	47	47	58	50	41	30	26	52	29	37	45
Rural	131	13	15	16	23	13	10	8	6	12	5	3	7
Urban	377	33	32	31	35	37	31	22	20	40	24	34	38
Dryden, t	78	11	6	4	5	6	9	8	1	9	3	6	10
Keewatin, t	20	.....	2	3	1	1	3	.....	2	1	1	3	3
Kenora, t	216	20	21	21	20	26	13	10	14	20	16	17	18
Sioux Lookout, t	63	2	3	3	9	4	6	4	3	10	4	8	7
Kent	1399	124	116	118	118	121	128	125	106	121	112	103	107
Rural	662	56	59	58	56	52	59	66	52	58	55	49	42
Urban	737	68	57	60	62	69	69	59	54	63	57	54	65
Chatham, c	494	44	39	36	36	50	46	42	35	42	39	43	42
Blenheim, t	35	2	4	3	3	1	6	1	3	4	2	1	5
Dresden, t	24	4	1	2	2	1	1	3	2	.....	4	1	3
Ridgetown, t	36	1	1	6	4	3	3	2	2	5	3	2	4
Tilbury, t	40	6	2	4	6	7	1	3	2	4	2	2	1
Wallaceburg, t	108	11	10	9	11	7	12	8	10	8	7	5	10
Lambton	998	76	96	98	86	92	87	80	94	61	71	70	87
Rural	493	37	46	51	44	53	41	28	45	28	33	39	48
Urban	505	39	50	47	42	39	46	52	49	33	38	31	39
Sarnia, c	426	32	42	40	36	33	38	42	42	24	34	27	36
Forest, t	11	1	.....	1	1	1	.....	3	.....	1	.....	1	2
Petrolia, t	68	6	8	6	5	5	8	7	7	8	4	3	1
Lanark	607	55	41	64	65	51	38	42	62	53	50	36	50
Rural	211	24	10	22	19	12	16	17	28	18	13	13	19
Urban	396	31	31	42	46	39	22	25	34	35	37	23	31
Almonte, t	81	3	1	14	10	6	7	7	4	7	12	5	5
Carleton Place, t	68	8	5	6	4	7	2	1	11	7	11	1	5
Perth, t	81	6	11	3	11	6	5	6	9	9	3	5	7
Smith's Falls, t	166	14	14	19	21	20	8	11	10	12	11	12	14
Leeds	608	45	53	43	58	43	62	35	66	49	49	50	55
Rural	320	22	26	27	27	22	36	22	32	23	26	25	32
Urban	288	23	27	16	31	21	26	13	34	26	23	25	23
Brockville, t	217	17	20	14	21	15	21	11	29	19	18	17	15
Gananoque, t	71	6	7	2	10	6	5	2	5	7	5	8	8
Lennox	174	14	9	16	16	30	21	12	13	17	13	10	3
Rural	146	12	6	11	16	28	13	10	12	16	11	8	3
Urban	28	2	3	5	.....	2	8	2	1	1	2	2	.....
Napanee, t	28	2	3	5	.....	2	8	2	1	1	2	2	.....
Lincoln	967	85	66	93	82	76	90	95	75	77	85	75	68
Rural	303	25	28	27	28	26	26	23	21	21	29	29	20
Urban	664	60	38	66	54	50	64	72	54	56	56	46	48
St. Catharines, c	570	53	29	56	46	39	54	62	47	51	51	42	40
Grimsby, t	45	5	6	5	7	4	5	5	3	1	.....	2	2
Merritton, t	37	2	2	4	1	5	4	4	3	2	4	2	4
Niagara, t	12	.....	1	1	.....	2	1	1	1	2	1	.....	2
Manitoulin	273	23	24	24	23	24	24	22	15	32	22	26	14
Rural	273	23	24	24	23	24	24	22	15	32	22	26	14
Middlesex	2002	201	153	178	153	188	184	183	157	140	168	141	156
Rural	469	72	37	39	34	30	38	40	30	36	42	29	42
Urban	1533	129	116	139	119	158	146	143	127	104	126	112	114
London, c	1438	123	112	127	107	148	142	136	116	97	116	107	107
Parkhill, t	12	1	1	2	1	2	1	1	1	2	.....	.....	.....
Strathroy, t	83	5	3	10	11	8	3	6	10	5	10	5	7
Muskoka	433	32	29	39	32	37	39	37	43	42	33	30	40
Rural	235	18	16	22	18	21	17	17	29	22	17	16	22
Urban	198	14	13	17	14	16	22	20	14	20	16	14	18

Table 3—Births (exclusive of Still-births) by Months, Classified as Rural and Urban, for Ontario by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Muskoka—*Continued*													
Bracebridge, t.	79	4	6	7	7	6	6	9	5	9	6	5	9
Gravenhurst,	40	5	3	2	2	1	6	4	6	4	3	1	3
Huntsville, t.	79	5	4	8	5	9	10	7	3	7	7	8	6
Nipissing	1220	94	120	103	110	101	113	115	102	89	83	87	103
Rural	520	39	46	48	55	40	48	51	35	40	42	39	37
Urban	700	55	74	55	55	61	65	64	67	49	41	48	66
North Bay, c.	435	30	41	31	35	35	49	37	45	34	28	29	41
Mattawa, t.	71	4	12	3	6	7	6	5	7	5	3	5	8
Sturgeon Falls, t.	194	21	21	21	14	19	10	22	15	10	10	14	17
Norfolk	560	36	51	55	53	51	58	45	49	41	43	47	31
Rural	373	27	36	38	38	33	42	29	31	25	26	27	21
Urban	187	9	15	17	15	18	16	16	18	16	17	20	10
Simcoe, t.	187	9	15	17	15	18	16	16	18	16	17	20	10
Northumberland	519	39	39	52	40	57	49	54	50	37	37	28	37
Rural	348	27	27	34	26	38	34	40	32	21	23	23	23
Urban	171	12	12	18	14	19	15	14	18	16	14	5	14
Campbellford, t.	50	1	3	7	6	6	1	6	6	4	2	1	7
Cobourg, t.	121	11	9	11	8	13	14	8	12	12	12	4	7
Ontario	1260	100	94	101	103	111	131	109	108	129	89	79	106
Rural	481	35	32	34	44	39	59	37	41	55	36	27	42
Urban	779	65	62	67	59	72	72	72	67	74	53	52	64
Oshawa, c.	703	59	58	62	48	65	66	69	58	69	45	45	59
Uxbridge, t.	23	2	1	2	6	.....	2	.....	4	1	2	3	.....
Whitby, t.	53	4	3	3	5	7	4	3	5	4	6	4	5
Oxford	776	72	79	78	53	67	62	72	58	59	73	45	58
Rural	358	37	45	36	26	31	31	32	28	22	29	17	24
Urban	418	35	34	42	27	36	31	40	30	37	44	28	34
Woodstock, c.	225	14	23	18	13	21	17	21	17	20	28	16	17
Ingersoll, t.	101	10	7	9	10	5	12	10	6	9	7	6	10
Tillsonburg, t.	92	11	4	15	4	10	2	9	7	8	9	6	7
Parry Sound	593	43	49	54	50	70	51	38	61	45	57	36	39
Rural	464	32	40	41	38	52	37	29	49	41	44	26	35
Urban	129	11	9	13	12	18	14	9	12	4	13	10	4
Parry Sound, t.	129	11	9	13	12	18	14	9	12	4	13	10	4
Peel	418	38	36	38	30	39	34	36	33	30	32	41	31
Rural	283	22	23	30	19	32	24	23	23	18	21	26	22
Urban	135	16	13	8	11	7	10	13	10	12	11	15	9
Brampton, t.	135	16	13	8	11	7	10	13	10	12	11	15	9
Perth	972	72	82	99	82	77	94	95	81	69	87	69	65
Rural	424	38	38	45	35	30	41	43	33	30	29	32	30
Urban	548	34	44	54	47	47	53	52	48	39	58	37	35
Stratford, c.	401	21	30	41	31	36	42	36	35	26	43	29	31
Listowel, t.	56	4	5	5	8	5	2	7	3	4	8	3	2
Mitchell, t.	24	1	4	2	2	2	3	1	2	4	2	1	.....
St. Mary's, t.	67	8	5	6	6	4	6	8	8	5	5	4	2
Peterborough	811	65	57	58	80	81	75	76	65	70	69	62	53
Rural	253	15	19	21	28	22	26	21	19	29	20	16	17
Urban	558	50	38	37	52	59	49	55	46	41	49	46	36
Peterborough, c.	558	50	38	37	52	59	49	55	46	41	49	46	36
Prescott	731	56	56	52	79	63	72	65	56	57	63	59	53
Rural	488	31	43	40	54	29	48	49	46	39	39	40	30
Urban	243	25	13	12	25	34	24	16	10	18	24	19	23
Hawkesbury, t.	194	24	12	8	20	29	16	13	6	14	20	4	18
Vankleek Hill, t.	49	1	1	4	5	5	8	3	4	4	4	5	5
Prince Edward	270	18	27	21	26	20	17	18	22	33	24	20	24
Rural	183	9	18	15	19	14	13	15	13	20	17	14	16
Urban	87	9	9	6	7	6	4	3	9	13	7	6	8
Picton, t.	87	9	9	6	7	6	4	3	9	13	7	6	8
Rainy River	420	36	43	42	45	38	27	40	40	24	32	21	32
Rural	184	12	15	16	18	25	17	15	20	12	12	7	15
Urban	236	24	28	26	27	13	10	25	20	12	20	14	17
Fort Frances, t.	189	21	24	17	19	13	7	21	13	12	14	14	14
Rainy River, t.	47	3	4	9	8	.....	3	4	7	.....	6	.....	3
Renfrew	1243	94	93	121	97	111	105	113	118	111	106	87	87
Rural	696	51	49	66	58	67	63	67	67	57	59	44	48
Urban	547	43	44	55	39	44	42	46	51	54	47	43	39
Arnprior, t.	107	16	10	11	6	5	11	7	9	11	8	5	8
Pembroke, t.	292	17	21	26	17	26	21	28	28	27	27	30	24
Renfrew, t.	148	10	13	18	16	13	10	11	14	16	12	8	7
Russell	596	46	54	51	50	59	47	51	48	56	41	42	51
Rural	507	37	47	44	40	46	43	47	37	49	34	39	44
Urban	89	9	7	7	10	13	4	4	11	7	7	3	7
Rockland, t.	89	9	7	7	10	13	4	4	11	7	7	3	7
Simcoe	1637	145	129	137	121	152	150	115	157	151	160	110	110
Rural	740	67	54	60	67	62	58	45	86	65	80	49	47
Urban	897	78	75	77	54	90	92	70	71	86	80	61	63
Alliston, t.	34	1	3	4	.....	1	4	1	6	6	3	2	3
Barrie, t.	169	17	19	15	9	12	21	16	12	13	9	13	13
Collingwood, t.	95	14	6	9	3	7	10	5	7	10	13	6	5
Midland, t.	223	16	15	13	23	24	17	16	17	28	22	10	22
Orillia, t.	244	20	18	24	12	31	29	21	20	17	22	17	13
Penetanguishene, t.	132	10	14	12	7	15	11	11	9	12	11	13	7

Table 3—Births (exclusive of Still-births) by Months, Classified as Rural and Urban, for Ontario by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Stormont	922	72	66	70	86	83	87	85	89	90	58	58	78
Rural	434	35	28	34	38	37	41	37	36	44	27	31	46
Urban	488	37	38	36	48	46	46	48	53	46	31	27	32
Cornwall, t	488	37	38	36	48	46	46	48	53	46	31	27	32
Sudbury	1479	109	118	131	132	137	144	123	119	116	115	104	131
Rural	844	61	66	75	73	74	92	73	63	66	72	60	69
Urban	635	48	52	56	59	63	52	50	56	50	43	44	62
Capreol, t	69	9	6	5	8	4	3	4	6	4	8	3	8
Chelmsford, t	46	2	4	4	5	10	5	3	1	1	.....	5	6
Copper Cliff, t	68	9	2	4	4	9	4	3	6	5	4	10	8
Sudbury, t	453	28	40	43	42	40	40	40	43	40	31	26	40
Thunder Bay	1402	108	138	104	152	144	118	118	107	102	102	106	103
Rural	180	16	16	18	21	16	13	18	10	16	13	13	10
Urban	1222	92	122	86	131	128	105	100	97	86	89	93	93
Fort William, c	664	45	64	54	87	70	62	46	48	45	47	53	43
Port Arthur, c	558	47	58	32	44	58	43	54	49	41	42	40	50
Temiskaming	896	78	70	74	79	69	82	75	70	87	85	66	61
Rural	587	48	39	38	52	47	62	48	40	63	58	46	46
Urban	309	30	31	36	27	22	20	27	30	24	27	20	15
Cobalt, t	103	14	13	8	9	10	6	7	13	6	11	3	3
Haileybury, t	70	7	4	9	8	1	6	7	5	6	6	7	4
New Liskeard, t	136	9	14	19	10	11	8	13	12	12	10	10	8
Victoria	473	45	27	40	42	47	40	40	34	47	48	32	31
Rural	295	26	20	28	33	30	26	19	16	29	29	19	20
Urban	178	19	7	12	9	17	14	21	18	18	19	13	11
Lindsay, t	178	19	7	12	9	17	14	21	18	18	19	13	11
Waterloo	1767	147	124	160	153	158	140	150	161	147	146	148	133
Rural	453	31	36	35	34	45	40	43	46	33	35	36	39
Urban	1314	116	88	125	119	113	100	107	115	114	111	112	94
Galt, c	266	25	19	23	27	26	19	23	27	19	17	25	16
Kitchener, c	751	59	54	68	65	56	63	64	65	72	65	65	55
Elmira, t	33	1	3	4	4	1	1	4	3	3	6	2	1
Hespeler, t	35	3	2	4	2	6	2	5	3	3	2	1	2
Preston, t	113	17	4	17	9	14	9	4	6	6	10	7	10
Waterloo, t	116	11	6	9	12	10	6	7	11	11	11	12	10
Welland	1642	139	142	170	116	132	119	139	164	142	120	131	128
Rural	602	43	58	63	46	45	50	56	66	52	41	46	36
Urban	1040	96	84	107	70	87	69	83	98	90	79	85	92
Niagara Falls, c	445	34	41	38	24	42	24	36	45	36	47	43	35
Welland, c	279	34	21	35	22	22	20	19	23	25	13	19	26
Bridgeburg, t	65	6	3	5	4	4	8	4	7	7	4	6	7
Port Colborne, t	137	14	12	14	10	11	9	12	13	14	6	7	15
Thorold, t	114	8	7	15	10	8	8	12	10	8	9	10	9
Wellington	1098	87	101	91	100	97	97	114	101	78	88	74	70
Rural	647	54	61	48	53	57	55	72	57	42	55	48	45
Urban	451	33	40	43	47	40	42	42	44	36	33	26	25
Guelph, c	362	31	36	33	35	33	33	28	35	27	26	23	22
Harriston, t	14	1	1	3	.....	2	2	.....	1	2	1	1	.....
Mount Forest, t	42	.....	.....	4	7	3	3	6	7	4	5	1	2
Palmerston, t	33	1	3	3	5	2	4	8	1	3	1	1	1
Wenworth	3436	304	292	314	270	296	298	290	305	261	278	261	267
Rural	367	25	31	23	28	37	33	30	36	31	36	29	28
Urban	3059	279	261	291	242	259	265	260	269	230	242	232	239
Hamilton, c	3007	270	255	288	240	253	260	257	265	222	237	227	233
Dundas, t	62	9	6	3	2	6	5	3	4	8	5	5	6
York	15635	1240	1179	1398	1211	1387	1353	1365	1333	1315	1280	1248	1326
Rural	2856	219	203	273	231	257	240	254	249	244	247	226	213
Urban	12779	1021	976	1125	980	1130	1113	1111	1084	1071	1033	1022	1113
Toronto, c	12342	983	943	1093	943	1090	1072	1076	1049	1031	1992	985	1085
Aurora, t	29	3	1	1	3	2	2	1	6	3	3	1	3
Mimico, t	129	9	11	15	8	8	17	11	8	9	16	8	9
Newmarket, t	109	8	8	8	6	9	8	10	7	15	11	10	9
New Toronto, t	105	10	10	2	13	14	8	9	8	7	6	14	4
Weston, t	65	8	3	6	7	7	6	4	6	6	5	4	3

Table 4—Total Births (exclusive of Still-births) and Births in Public Institutions, Showing the Number of Mothers Non-Resident in the Province of Ontario, 1928.

	All Births		In Public Institutions	
	Total	Births to mothers non-resident in province	Total	Births to mothers non-resident in province
Total in Province	68,510	698	20,768	467

Table 5—Births (exclusive of Still-births) to Resident and Non-Resident Mothers, and Births in Public Institutions, in the Cities and Towns of Ontario of 5,000 Population and over, 1928.

Cities and towns	All Births				Births in Public Institutions				Births Elsewhere Than in Public Institutions			
	Total	To resident mothers	To mothers non-resident in city or town where birth occurred, who were		Total	To resident mothers	To mothers non-resident in city or town where birth occurred, who were		Total	To resident mothers	To mothers non-resident in city or town where birth occurred, who were	
			Resident in province	Non-resident in province			Resident in province	Non-resident in province			Resident in province	Non-resident in province
Cities:												
Belleville	371	262	103	6	222	118	100	4	149	144	3	2
Brantford	711	607	95	9	412	318	87	7	299	289	8	2
Chatham	494	292	191	11	309	118	181	10	185	174	10	1
Fort William	664	584	79	1	280	216	64	.....	384	368	15	1
Galt	266	212	52	2	131	80	51	.....	135	132	1	2
Guelph	362	300	62	.....	174	116	58	.....	188	184	4	.....
Hamilton	3007	2743	247	17	1488	1258	219	11	1519	1485	28	6
Kingston	576	401	159	16	373	211	150	12	203	190	9	4
Kitchener	751	662	87	2	283	203	78	2	468	459	9	.....
London	1438	1227	195	16	897	704	179	14	541	523	16	2
Niagara Falls	445	399	35	11	120	81	32	7	325	318	3	4
North Bay	435	380	54	1	103	73	29	1	332	307	25	.....
Oshawa	703	628	71	4	300	238	59	3	403	390	12	1
Ottawa	3003	2471	347	185	1737	1244	324	169	1266	1227	23	16
Owen Sound	368	268	98	2	209	118	89	2	159	150	9	.....
Peterborough	558	437	120	1	428	307	120	1	130	130	.....	.....
Port Arthur	558	429	127	2	330	222	106	2	228	207	21	.....
St. Catharines	570	496	70	4	226	169	55	2	344	327	15	2
St. Thomas	341	277	61	3	196	137	58	1	145	140	3	2
Sarnia	426	360	55	11	206	149	50	7	220	211	5	4
Sault Ste. Marie	627	561	60	6	165	123	37	5	462	438	23	1
Stratford	401	321	75	5	210	138	68	4	191	183	7	1
Toronto	12342	11562	690	90	6522	5826	623	73	5820	5736	67	17
Welland	279	238	39	2	76	39	36	1	203	199	3	1
Windsor	1681	1479	167	35	662	476	153	33	1019	1003	14	2
Woodstock	225	160	62	3	130	69	59	2	95	91	3	1
Towns:												
Barrie	169	107	62	.....	96	41	55	.....	73	66	7	.....
Brockville	217	154	57	6	177	114	57	6	40	40	.....	.....
Cobourg	121	95	25	1	58	32	25	1	63	63	.....	.....
Collingwood	95	67	26	2	47	21	24	2	48	46	2	.....
Cornwall	488	380	94	14	271	165	93	13	217	215	1	1
Eastview	185	182	1	2	.....	.....	.....	.....	185	182	1	2
Ford City	347	346	1	.....	4	4	.....	.....	343	342	1	.....
Hawkesbury	194	189	1	4	17	13	1	3	177	176	.....	1
Ingersoll	101	75	26	.....	45	22	23	.....	56	53	3	.....
Kenora	216	167	42	7	125	84	35	6	91	83	7	1
Lindsay	178	134	44	.....	84	45	39	.....	94	89	5	.....
Midland	223	187	36	.....	82	49	33	.....	141	138	3	.....
Orillia	244	159	83	2	176	95	79	2	68	64	4	.....
Pembroke	292	197	84	11	125	42	73	10	167	155	11	1
Preston	113	106	7	.....	9	8	1	.....	104	98	6	.....
Smith's Falls	166	110	54	2	114	63	49	2	52	47	5	.....
Sudbury	453	370	75	8	130	67	61	2	323	303	14	6
Trenton	113	104	6	3	.....	.....	.....	.....	113	104	6	3
Walkerville	425	246	166	13	317	140	165	12	108	106	1	1
Waterloo	116	114	1	1	6	6	.....	.....	110	108	1	1
Brampton	135	85	50	.....	68	19	49	.....	67	66	1	.....
Dundas	62	57	5	.....	8	4	4	.....	54	53	1	.....
Fort Frances	189	180	7	2	34	31	3	.....	155	149	4	2
Leamington	93	82	7	4	19	14	5	.....	74	68	2	4
Mimico	129	117	12	.....	21	16	5	.....	108	101	7	.....
New Toronto	105	88	17	.....	26	11	15	.....	79	77	2	.....
Port Colborne	137	132	4	1	.....	.....	.....	.....	137	132	4	1
Renfrew	148	114	32	2	46	14	30	2	102	100	2	.....
Timmins	432	407	23	2	40	27	13	.....	392	380	10	2
Whitby	53	50	3	.....	1	1	.....	.....	52	49	3	.....

Table 6—Births (exclusive of Still-births) Classified as Legitimate or Illegitimate and as Single or Plural by Sex, for Cities and Towns of 5,000 and over, 1928—Ontario

Province, Cities and Towns	Total Births			Legitimate			Illegitimate			Single Births			Twin Births			Triplets		
	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total
Ontario	**35,299**	**33,211**	**68,510**	**34,190**	**32,150**	**66,340**	**1,109**	**1,061**	**2,170**	**34,565**	**32,480**	**67,045**	**728**	**716**	**722**	**6**	**15**	**7**
Cities and towns of 5,000 and over—																		
Toronto	6,394	5,948	12,342	6,061	5,653	11,714	333	295	628	6,247	5,836	12,083	145	111	128	2	1	1
Hamilton	1,584	1,423	3,007	1,511	1,355	2,866	73	68	141	1,553	1,389	2,942	31	31	31	.....	3	1
Ottawa	1,549	1,454	3,003	1,411	1,318	2,729	138	136	274	1,501	1,418	2,919	48	36	42	.....	.....	.....
London	720	718	1,438	680	667	1,347	40	51	91	711	703	1,414	9	15	12	.....	.....	.....
Windsor	895	786	1,681	868	766	1,634	27	20	47	870	767	1,637	25	19	22	.....	.....	.....
Brantford	366	345	711	360	339	699	6	6	12	358	341	699	8	4	6	.....	.....	.....
Kitchener	393	358	751	384	342	726	9	16	25	388	353	741	5	5	5	.....	.....	.....
Kingston	286	290	576	274	274	548	12	16	28	283	285	568	3	5	4	.....	.....	.....
Sault Ste. Marie	331	296	627	321	291	612	10	5	15	325	290	615	6	6	6	.....	.....	.....
Peterborough	288	270	558	282	259	541	6	11	17	285	263	548	3	7	5	.....	.....	.....
Fort William	323	341	664	316	331	647	7	10	17	320	332	652	3	9	6	.....	.....	.....
St. Catharines	291	279	570	285	275	560	6	4	10	285	275	560	6	4	5	.....	.....	.....
Guelph	182	180	362	178	176	354	4	4	8	182	180	362	.....	.....	.....	.....	.....	.....
Stratford	216	185	401	207	182	389	9	3	12	208	176	384	6	8	7	2	1	1
St. Thomas	160	181	341	159	178	337	1	3	4	155	176	331	5	5	5	.....	.....	.....
Port Arthur	295	263	558	289	254	543	6	9	15	287	253	540	8	10	9	.....	.....	.....
Sarnia	200	226	426	197	223	420	3	3	6	198	216	414	2	10	6	.....	.....	.....
Niagara Falls	231	214	445	224	211	435	7	3	10	231	210	441	.....	4	2	.....	.....	.....
Chatham	269	225	494	258	220	478	11	5	16	266	216	482	3	9	6	.....	.....	.....
Galt	149	117	266	148	115	263	1	2	3	149	115	264	.....	2	1	.....	.....	.....
Belleville	208	163	371	202	159	361	6	4	10	200	157	357	8	6	7	.....	.....	.....
Owen Sound	169	199	368	160	195	355	9	4	13	164	190	354	5	9	7	.....	.....	.....
Oshawa	357	346	703	345	339	684	12	7	19	351	332	683	6	14	10	.....	.....	.....
North Bay	212	223	435	205	212	417	7	11	18	204	219	423	8	4	6	.....	.....	.....
Brockville	109	108	217	108	104	212	1	4	5	105	108	213	4	.....	2	.....	.....	.....
Woodstock	113	112	225	109	110	219	4	2	6	112	111	223	1	1	1	.....	.....	.....
Orillia	130	114	244	127	109	236	3	5	8	130	114	244	.....	.....	.....	.....	.....	.....
Welland	152	127	279	149	122	271	3	5	8	147	126	273	5	1	3	.....	.....	.....
Sudbury	249	204	453	243	198	441	6	6	12	244	199	443	5	5	5	.....	.....	.....
Pembroke	150	142	292	147	136	283	3	6	9	149	137	286	1	5	3	.....	.....	.....
Lindsay	91	87	178	90	85	175	1	2	3	90	86	176	1	1	1	.....	.....	.....
Cornwall	262	226	488	257	218	475	5	8	13	252	218	470	10	8	9	.....	.....	.....
Walkerville	205	220	425	201	215	416	4	5	9	199	218	417	6	2	4	.....	.....	.....
Midland	111	112	223	110	109	219	1	3	4	106	109	215	5	3	4	.....	.....	.....
Barrie	92	77	169	87	74	161	5	3	8	92	75	167	.....	2	1	.....	.....	.....
Smith's Falls	87	79	166	83	76	159	4	3	7	87	77	164	.....	2	1	.....	.....	.....
Trenton	55	58	113	53	57	110	2	1	3	55	56	111	.....	2	1	.....	.....	.....
Waterloo	58	58	116	57	57	114	1	1	2	58	58	116	.....	.....	.....	.....	.....	.....
Collingwood	52	43	95	51	43	94	1	.....	1	51	42	93	1	1	1	.....	.....	.....
Ford City	183	164	347	182	164	346	1	.....	1	179	160	339	4	4	4	.....	.....	.....
Hawkesbury	103	91	194	103	90	193	.....	1	1	101	91	192	2	.....	1	.....	.....	.....
Preston	58	55	113	56	55	111	2	.....	2	58	55	113	.....	.....	.....	.....	.....	.....
Kenora	119	97	216	118	95	213	1	2	3	116	96	212	3	1	2	.....	.....	.....
Cobourg	70	51	121	66	49	115	4	2	6	66	49	115	4	2	3	.....	.....	.....

Eastview	101	84	185	101	83	184	.....	1	1	100	83	183	1	1	1	.....	.....	.....
Ingersoll	47	54	101	47	54	101	.....	.....	.....	45	52	97	2	2	2	.....	.....	.....
Brampton	74	61	135	74	61	135	.....	.....	.....	74	56	130	.....	2	1	.....	3	1
Dundas	36	26	62	36	26	62	.....	.....	.....	36	24	60	.....	2	1	.....	.....	.....
Fort Frances	94	95	189	90	94	184	4	1	5	94	93	187	.....	2	1	.....	.....	.....
Leamington	46	47	93	44	46	90	2	1	3	46	47	93	.....	.....	.....	.....	.....	.....
Mimico	69	60	129	63	58	121	6	2	8	63	60	123	6	.....	3	.....	.....	.....
New Toronto	54	51	105	49	50	99	5	1	6	53	50	103	1	1	1	.....	.....	.....
Port Colborne	74	63	137	74	61	135	.....	2	2	71	62	133	3	1	2	.....	.....	.....
Renfrew	69	79	148	68	75	143	1	4	5	69	79	148	.....	.....	.....	.....	.....	.....
Timmins	230	202	432	224	196	420	6	6	12	228	198	426	2	4	3	.....	.....	.....
Whitby	30	23	53	30	23	53	.....	.....	.....	30	23	53	.....	.....	.....	.....	.....	.....

Table 7—Births (exclusive of Still-births)

Age of Father	Total	AGE OF																
		12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Under 16 years	....	..	..	..	....	....	....	....	....	....	....	....	....	....	....	....	....	....
16	1	..	..	..	....	....	....	....	1	....	....	....	....	....	....	....	....	....
17	10	..	..	..	1	3	3	....	2	....	....	....	....	....	....	....	....	....
18	107	..	..	..	4	7	15	35	13	17	6	7	1	1	....	....	....	....
19	335	..	..	..	3	16	47	86	89	40	25	14	5	2	5	1	....	1
20	658	..	..	..	8	22	57	115	132	121	75	60	23	15	12	4	1	7
21	1212	..	..	1	5	27	71	162	217	231	207	119	73	47	14	14	13	2
22	1653	..	..	1	7	15	68	145	264	258	277	238	170	88	50	28	16	13
23	2140	..	..	..	3	18	70	126	250	314	350	295	291	175	110	51	36	16
24	2663	..	..	..	2	14	55	107	225	314	345	394	348	388	173	106	86	29
25	2885	..	..	..	5	7	40	103	158	242	302	389	439	356	335	192	113	83
26	3086	..	..	1	1	11	23	66	152	229	272	329	348	422	380	356	171	147
27	3321	..	..	..	1	9	26	83	89	164	248	315	367	373	388	365	346	226
28	3719	..	..	..	....	5	25	57	88	128	203	273	314	435	401	413	405	400
29	3403	..	..	..	1	6	21	30	71	99	163	195	248	286	358	356	369	395
30	3492	..	..	..	3	3	13	33	44	104	116	145	207	291	300	322	328	430
31	3184	..	..	..	....	2	8	21	33	50	95	113	153	182	208	285	284	316
32	3225	..	..	..	1	1	10	21	30	49	59	126	118	163	205	195	232	315
33	3083	..	..	..	....	1	5	14	22	41	58	77	122	132	135	172	212	273
34	2899	..	..	..	....	1	5	3	24	30	40	61	78	161	126	140	171	235
35	2752	..	..	..	....	1	3	9	8	33	33	42	66	59	137	110	141	170
36	2627	..	..	..	....	1	....	2	7	19	28	37	59	77	64	131	119	159
37	2374	..	..	..	1	....	3	....	8	14	15	33	36	44	58	81	112	121
38	2585	..	..	..	....	1	....	6	4	7	19	33	38	60	46	61	76	138
39	2167	..	..	..	....	....	1	2	5	7	11	25	35	24	51	46	45	98
40	2071	..	..	..	....	2	3	3	5	7	6	17	18	33	40	57	54	69
41	1503	..	..	..	....	....	1	2	....	7	6	11	13	15	17	20	42	48
42	1572	..	..	..	....	1	....	2	3	5	6	6	14	22	18	28	37	36
43	1287	..	..	..	....	....	1	1	....	5	7	10	6	8	13	12	22	29
44	1014	..	..	..	....	....	....	....	2	4	5	4	4	7	10	12	17	18
45	939	..	..	..	....	....	....	1	1	1	3	3	7	11	7	8	15	25
46	737	..	..	..	....	....	....	....	2	1	....	1	6	2	12	7	8	16
47	588	..	..	..	....	....	....	....	1	2	4	2	4	3	5	4	5	11
48	585	..	..	..	....	....	1	1	....	1	....	4	4	2	4	4	7	9
49	452	..	..	..	....	....	....	....	1	....	1	2	4	3	3	6	1	5
50	372	..	..	..	....	....	....	1	....	....	1	....	....	2	6	6	9	7
51	225	..	..	..	1	....	....	....	....	1	1	....	2	....	3	1	2	4
52	212	..	..	..	....	....	....	....	....	....	1	....	....	3	....	1	1	6
53	149	..	..	..	....	....	1	....	....	....	....	2	....	2	2	2	3	1
54	139	..	..	..	....	....	....	1	....	1	....	....	....	1	1	1	1	6
55	113	..	..	..	....	....	....	....	....	....	....	....	....	1	....	....	2	2
56	86	..	..	..	....	....	....	....	....	1	....	....	....	1	....	1	1	1
57	71	..	..	..	....	....	....	....	1	....	1	....	....	2	2	....	1	1
58	50	..	..	..	....	....	....	....	....	....	....	....	....	....	....	1	2	2
59	35	..	..	..	....	....	....	....	....	1	....	....	....	....	....	....	....	1
60	34	..	..	..	....	....	....	....	....	....	....	....	1	....	....	....	....	1
61	18	..	..	..	....	....	....	....	....	....	....	....	1	....	....	....	....	....
62	14	..	..	..	....	....	....	....	....	....	....	....	....	....	....	1	1	....
63	17	..	..	..	....	....	....	....	....	....	....	1	1	....	....	....	....	....
64	10	..	..	..	....	....	....	....	1	....	....	....	....	....	....	....	....	2
65 and over	63	..	..	..	....	....	....	....	1	....	....	1	1	....	....	1	4	2
Not stated	403	..	..	..	....	....	....	1	2	3	3	6	4	2	5	2	2	4
Children born to married mothers	66,340	..	..	3	47	174	576	1239	1956	2551	2992	3390	3629	3901	3704	3604	3513	3880
Children born to unmarried mothers	2,170	..	4	16	56	119	197	233	233	216	173	157	136	86	73	57	47	61
Children born to all mothers	68,510	..	4	19	103	293	773	1472	2189	2767	3165	3547	3765	3987	3777	3661	3560	3941

Classified According to Ages of Parents, 1928—Ontario

MOTHER

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 and over	Not stated
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
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....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
4	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2
1	4	3	1	1	....	....	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	2
5	10	5	5	2	1	....	2	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	3
26	20	10	4	1	5	2	1	2	....	....	....	....	1	....	....	....	....	....	....	....	....	5
36	40	16	7	5	5	2	....	2	....	....	1	....	....	....	....	....	....	....	....	....	....	7
77	36	26	8	3	8	6	2	3	2	3	1	....	....	....	....	....	....	....	....	....	....	3
126	72	33	29	21	13	7	4	5	1	2	1	2	....	....	1	....	....	....	....	....	....	4
211	137	76	61	32	16	8	7	7	5	3	....	....	....	....	....	....	....	....	....	....	....	9
317	206	105	61	42	30	15	8	5	2	4	5	2	....	....	....	....	....	....	....	....	....	3
311	317	209	112	72	56	20	19	9	14	3	1	2	1	....	2	....	....	....	....	....	....	5
339	354	300	177	96	71	34	29	6	10	5	2	3	....	....	....	....	....	....	....	....	....	8
264	360	314	325	169	122	50	34	21	18	11	1	2	3	....	....	....	....	....	....	....	....	6
252	285	293	310	283	172	94	54	26	22	15	3	1	....	2	....	....	....	1	....	....	....	6
229	276	228	279	253	260	135	72	39	27	9	9	2	1	1	....	....	....	....	....	....	....	4
183	224	215	264	262	270	238	125	60	52	22	9	4	3	2	1	....	....	....	....	....	....	6
165	197	197	229	213	239	223	227	96	67	26	17	11	4	2	3	2	1	....	....	....	....	5
124	177	192	181	195	203	200	194	183	95	50	25	15	3	7	2	....	....	....	....	....	....	2
122	146	154	193	243	209	213	224	190	212	85	52	20	19	7	....	2	1	....	....	....	....	4
117	94	112	153	142	178	182	172	192	174	153	74	28	21	14	3	3	1	....	....	....	1	3
58	132	109	130	124	151	179	142	145	217	147	106	69	25	9	9	1	1	....	....	....	....	3
42	82	70	94	74	103	112	118	120	128	129	110	72	38	18	7	1	....	1	....	....	....	2
44	43	68	117	92	95	92	128	120	163	114	122	71	82	30	5	3	....	1	....	1	....	3
28	38	45	56	100	79	76	97	104	117	93	114	84	78	49	9	4	1	....	....	....	....	1
19	30	36	35	48	72	64	62	58	94	93	90	62	67	57	27	11	3	2	....	....	....	1
22	29	27	40	56	47	87	60	56	80	76	81	52	49	49	29	14	1	1	....	....	....	1
13	14	15	24	28	27	37	66	42	73	55	72	57	44	48	31	22	7	4	....	1	....	2
8	19	21	15	17	18	41	39	64	50	40	54	33	36	37	27	12	7	4	1	....	1	3
10	14	11	14	26	22	28	31	30	72	46	48	50	55	32	20	18	12	5	4	....	....	....
13	10	9	17	14	21	9	32	25	53	45	39	34	30	23	24	9	7	4	4	1	....	3
7	12	6	14	17	19	17	16	17	35	27	41	30	23	22	15	12	4	1	3	2	....	....
8	9	9	9	2	8	10	13	6	25	12	19	20	15	21	13	9	1	1	....	....	....	....
4	4	3	7	4	6	9	12	17	22	11	27	13	16	17	9	10	3	3	2	....	....	1
3	5	4	7	7	6	6	10	5	9	8	16	10	9	13	5	6	4	2	....	....	....	1
....	....	4	5	4	9	7	9	8	18	7	9	10	8	7	9	7	3	1	1	1	....	....
5	7	2	5	4	3	11	7	2	13	9	6	8	6	9	6	4	....	....	1	....	....	....
2	1	4	3	1	4	4	11	6	5	6	5	4	9	7	3	3	2	....	....	....	....	1
4	1	3	5	1	2	3	5	3	5	6	5	6	2	6	2	1	....	2	1	....	....	....
....	....	1	4	1	2	3	5	3	3	....	3	4	3	3	4	3	1	....	1	1	....	....
....	2	....	2	1	1	3	....	3	4	4	2	2	2	2	1	2	1	1	....	....	....	....
....	1	....	....	....	2	2	....	3	1	4	8	3	1	2	4	....	....	....	1	....	....	....
2	....	2	....	....	1	2	....	2	1	3	2	....	....	....	1	1	....	....	....	....	....	....
....	....	....	1	1	....	....	1	3	1	1	....	1	1	....	....	1	....	....	1	....	....	....
....	1	....	....	2	....	1	....	....	2	3	2	....	2	....	....	....	....	....	1	1	....	....
....	....	1	....	1	....	1	....	....	1	....	1	1	....	....	1	....	....	....	....	....	....	....
1	2	2	2	2	1	6	2	3	8	4	7	2	4	3	1	3	....	....	....	....	....	....
1	3	2	3	1	2	....	1	....	2	1	....	1	....	....	....	....	....	....	....	....	....	352
3205	3417	2945	3009	2663	2559	2239	2041	1694	1905	1335	1190	791	661	499	274	164	61	35	21	8	2	463
32	32	26	22	18	18	18	22	12	17	9	9	3	3	1	....	1	....	....	....	....	....	63
3237	3449	2971	3031	2681	2577	2257	2063	1706	1922	1344	1199	794	664	500	274	165	61	35	21	8	2	526

Table 8—Births (exclusive of Still-births) Classified According to Racial Origin of Parents, 1928—Ontario

Racial Origin of Father	Total	RACIAL ORIGIN OF MOTHER																																				
		English	Irish	Scotch	Welsh	French	Armenian	Austrian	Belgian	Bulgarian	Chinese	Czech and Slovak	Danish	Dutch	Finnish	German	Greek	Hindu	Hungarian	Icelandic	Indian	Italian	Japanese	Jewish	Negro	Norwegian	Polish	Rumanian	Russian	Serb and Croat	Swedish	Swiss	Syrian	Ukranian*	Other	Not specified
English	25229	18534	2318	2725	98	648	...	3	8	...	...	3	9	166	19	443	...	...	3	1	30	13	...	2	...	15	19	...	8	...	26	16	2	3	3	114
Irish	10968	2661	5241	1782	40	667	...	3	1	...	...	2	3	113	3	323	...	...	3	1	12	14	...	1	...	11	21	...	3	1	15	8	...	2	1	36
Scotch	9744	2871	1667	4350	59	319	...	1	2	...	...	...	6	110	10	237	...	...	...	1	11	7	...	2	1	10	10	...	1	...	23	10	...	...	1	35
Welsh	310	131	38	52	63	7	...	...	...	...	...	...	1	3	...	11	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	2
French	8520	521	522	283	5	6976	...	1	8	...	...	...	1	18	8	103	...	...	...	...	10	7	...	...	...	2	20	...	1	2	7	3	...	5	1	16
Armenian	48	1	...	1	...	1	45	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Austrian	192	11	4	3	...	7	...	141	...	...	...	...	...	...	...	4	...	...	2	...	...	1	...	...	1	...	6	1	1	...	...	...	...	6	...	4
Belgian	205	9	3	3	...	12	...	...	172	...	...	1	...	4	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bulgarian	40	6	2	1	...	1	...	3	...	22	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...	1
Chinese	34	2	1	2	...	1	...	...	...	...	25	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Czech and Slovak	134	2	1	1	...	3	...	2	1	...	...	115	...	...	...	2	...	...	2	...	...	...	...	...	...	...	3	...	...	1	...	...	...	1	...	...
Danish	83	11	11	16	...	7	...	...	...	...	...	...	29	...	3	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1
Dutch	757	217	126	117	3	27	...	1	3	...	...	...	...	237	2	20	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1	...	...	...	...
Finnish	401	4	4	1	...	2	...	...	...	...	...	...	...	...	385	...	...	...	...	...	1	...	...	...	...	...	1	...	1	...	1	...	...	...	1	...
German	3011	484	271	232	3	104	...	1	...	...	...	5	5	25	1	1840	...	...	...	1	2	...	...	1	...	5	9	...	2	1	5	7	...	1	...	6
Greek	168	28	8	5	...	5	...	...	...	...	...	2	1	1	...	2	106	...	1	...	...	...	...	...	...	...	2	...	1	1	...	...	...	3	1	1
Hindu	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hungarian	179	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	172	...	...	...	...	...	...	...	2	...	1	1	...	...	...	...	...	...
Icelandic	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Indian	501	22	7	7	...	11	...	...	...	...	...	...	...	...	...	1	...	...	...	447	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	4
Italian	1498	71	31	25	1	49	...	1	...	...	...	2	...	1	7	7	...	...	1	...	1	1287	...	...	1	2	3	1	...	...	1	...	1	1	1	3
Japanese	6	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Jewish	890	11	2	2	...	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	861	...	...	5	...	3	1	...	...	...	1	...	...	...
Negro	140	7	1	4	1	3	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	120	...	...	1	...	...	...	...	...	...	...	...	...	...
Norwegian	80	19	5	13	...	2	...	...	...	...	...	...	1	...	3	1	...	...	...	...	...	...	...	...	28	1	...	...	...	6	...	...	...	...	...	1
Polish	727	29	16	9	...	8	...	7	1	...	...	2	...	...	2	11	...	...	...	...	...	3	...	4	...	...	597	2	13	...	1	...	...	20	...	2
Rumanian	171	17	2	2	...	2	...	2	...	...	...	...	...	...	...	3	...	...	1	...	1	1	...	...	...	...	10	112	5	2	...	...	...	10	...	1
Russian	317	35	2	7	1	3	...	26	...	...	...	4	...	1	1	4	...	...	...	...	1	...	...	5	1	1	32	7	153	...	1	1	...	26	2	3
Serb and Croat	120	6	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	4	1	...	103	...	...	...	2	...	1
Swedish	218	34	15	14	...	14	...	...	...	...	...	...	3	1	16	3	...	...	1	1	...	...	...	...	...	7	2	...	1	...	103	...	...	...	1	2
Swiss	79	17	10	7	1	4	...	...	...	...	...	...	1	2	...	19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	17	...	...	...	...
Syrian	92	4	1	4	...	9	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	73	...	...	...
Ukrainian*	586	5	3	2	...	2	...	8	...	...	...	3	...	...	2	3	...	...	1	...	...	...	...	...	1	...	39	1	8	1	...	...	...	505	...	2
Other	107	16	8	6	1	7	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	...	...	...	...	...	1	...	1	1	1	...	...	1	59	1
Not specified	780	123	21	41	...	20	...	...	...	...	...	...	...	1	...	6	...	...	...	...	8	...	...	...	...	...	1	...	...	...	1	...	...	1	...	557
Children born to married mothers	66340	25912	10342	9719	276	8923	45	201	196	22	25	139	61	683	464	3052	106	...	189	8	525	1336	5	876	127	83	791	125	204	115	195	64	76	591	71	793
M	34190	13398	5322	5058	138	4579	26	102	107	7	12	72	31	361	242	1555	55	...	104	3	263	704	3	445	68	37	366	70	103	59	92	25	33	290	32	428
F	32150	12514	5020	4661	138	4344	19	99	89	15	13	67	30	322	222	1497	51	...	85	5	262	632	2	431	59	46	425	55	101	56	103	39	43	301	39	365

Children born to unmarried mothers.....	2170	781	324	338	6	302	...	2	1	...	...	2	...	14	20	103	2	...	7	...	88	12	...	4	11	2	15	...	1	3	3	2	1	19	4	103
M	1109	380	167	180	2	163	...	2	...	...	...	1	...	9	10	47	1	...	4	...	42	7	...	2	6	2	11	...	1	2	2	2	1	11	1	53
F	1061	401	157	158	4	139	...	...	1	...	...	1	...	5	10	56	1	...	3	...	46	5	...	2	5	...	4	...	...	1	1	...	...	8	3	50
Children born to all mothers.....	68510	26693	10666	0057	282	9225	45	203	197	22	25	141	61	697	484	3155	108	...	196	8	613	1348	5	880	138	85	806	125	205	118	198	66	77	610	75	896
M	35299	13778	5489	5238	140	4742	26	104	107	7	12	73	31	370	252	1602	56	...	108	3	305	711	3	447	74	39	377	70	104	61	94	27	34	301	33	481
F	33211	12915	5177	4819	142	4483	19	99	90	15	13	68	30	327	232	1553	52	...	88	5	308	637	2	433	64	46	429	55	101	57	104	39	43	309	42	415

•Including "Galician" and "Bukovinian."

Table 9—Births (exclusive of Still-births) Classified

Racial Origin of Mother	Total	AGE OF														
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
English	25,912	1	23	72	218	508	857	1083	1246	1361	1449	1523	1448	1446	1443	1534
Irish	10,342	....	4	18	80	166	227	322	375	473	482	584	529	536	567	615
Scotch	9,719	....	2	12	54	134	221	318	392	437	499	561	572	551	496	605
Welsh	276	....	....	1	3	7	5	10	5	9	7	14	16	14	12	21
French	8,923	....	11	39	99	198	308	355	449	510	548	519	514	455	463	474
Armenian	45	....	....	....	....	1	....	2	3	4	2	2	9	3	2	1
Austrian	201	....	....	....	1	1	7	11	12	6	15	10	17	4	10	16
Belgian	196	....	....	....	1	4	2	9	8	6	7	17	8	11	12	13
Bulgarian	22	....	....	....	....	....	....	1	1	3	....	2	....	....	3	....
Chinese	25	....	....	....	....	1	....	1	2	....	3	....	....	2	1	3
Czech and Slovak	139	....	....	....	....	2	2	4	5	3	11	12	10	17	11	13
Danish	61	....	....	....	....	1	....	5	4	4	4	2	....	4	3	8
Dutch	683	....	....	....	8	15	27	23	34	31	40	49	38	32	31	36
Finnish	464	....	....	2	5	11	14	24	24	25	39	36	36	32	34	22
German	3,052	1	1	11	21	45	82	111	128	152	170	193	176	173	120	177
Greek	106	....	....	....	....	....	1	3	8	8	6	6	5	9	3	9
Hindu	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Hungarian	189	....	....	....	2	5	3	9	9	14	9	14	7	16	13	10
Icelandic	8	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....
Indian	525	....	3	5	12	20	23	26	24	25	29	29	26	15	19	26
Italian	1,336	1	2	6	19	32	51	47	59	64	69	80	66	68	72	61
Japanese	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Jewish	876	....	....	....	1	5	17	35	40	68	63	65	65	55	56	68
Negro	127	....	....	1	1	6	3	7	4	10	7	6	7	8	6	6
Norwegian	83	....	....	....	....	2	4	....	5	4	8	6	4	7	6	4
Polish	791	....	....	2	12	18	29	48	31	50	42	67	39	47	33	34
Rumanian	125	....	....	....	1	3	4	6	3	7	5	3	6	6	6	8
Russian	204	....	....	1	3	3	6	7	10	14	12	13	9	11	10	10
Serb and Croat	115	....	....	....	2	2	1	2	12	8	7	8	11	8	8	7
Swedish	195	....	....	....	5	4	3	13	5	13	18	12	6	14	10	10
Swiss	64	....	....	....	2	1	1	1	4	2	4	2	8	4	1	....
Syrian	76	....	....	....	1	....	2	3	4	5	5	5	1	1	6	4
Ukrainian*	591	....	1	2	14	28	31	35	43	49	37	34	36	21	22	35
Other	71	....	....	....	1	4	1	....	5	3	1	6	2	2	7	4
Not specified	793	....	....	2	10	12	24	30	38	22	30	21	33	31	27	45
Total	66,340	3	47	174	576	1239	1956	2551	2992	3390	3629	3901	3704	3604	3513	3880

*Including "Galician" and "Bukovinian."

According to Age and Racial Origin of Married Mothers, 1928—Ontario

MOTHER

29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 and over	Not stated-
1258	1369	1207	1162	990	979	853	750	637	693	460	407	288	250	173	90	45	24	12	7	3	....	43
541	598	497	511	450	453	404	370	303	319	239	229	142	118	83	49	22	8	2	3	1	....	22
509	518	471	499	425	416	356	311	247	301	226	178	118	92	81	43	33	11	6	1	1	....	22
15	15	11	16	11	13	9	13	11	8	7	3	5	6	5	1	1	1	....	....	....	....	1
382	395	332	382	380	323	262	257	239	243	181	167	124	89	74	56	30	6	6	6	2	....	45
1	3	1	3	....	....	3	....	1	2	....	1	....	....	....	....	....	....	....	....	....	....	1
5	9	6	12	8	10	3	8	6	9	1	5	....	2	1	1	2	....	....	....	....	1	2
13	15	11	2	7	2	3	11	5	11	1	4	2	3	3	4	....	....	....	....	....	....	1
....	3	1	1	1	1	1	....	2	1	....	1	....	....	....	....	....	....	....	....	....	....	....
....	1	....	....	1	....	6	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	1
6	6	3	7	5	5	5	1	2	3	....	5	....	1	....	....	....	....	....	....	....	....	....
6	1	6	2	2	....	2	....	1	1	1	....	1	1	2	....	....	....	....	....	....	....	....
29	34	31	33	25	19	28	17	14	24	14	13	12	10	7	4	....	....	....	....	....	....	5
26	18	12	15	10	8	20	8	6	13	6	7	3	1	1	3	2	1	....	....	....	....	....
141	141	128	143	142	111	95	120	86	93	87	60	40	36	25	11	17	4	1	2	1	....	7
4	6	7	2	2	3	4	3	4	1	....	4	....	2	....	....	1	....	....	....	....	....	5
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
8	8	13	9	10	4	7	4	2	6	3	1	1	1	....	....	....	....	....	....	....	....	1
1	....	1	1	1	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
21	24	15	15	10	17	12	11	11	15	6	9	6	5	3	1	1	....	1	....	....	....	60
67	66	65	45	44	51	58	48	31	40	31	28	13	9	16	2	4	2	2	1	....	1	15
....	1	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....
42	51	26	35	32	28	24	15	15	25	13	10	1	5	....	1	1	2	1	....	....	....	11
6	10	5	6	3	4	1	....	3	4	1	2	4	1	2	....	1	....	....	....	....	....	2
5	4	1	3	3	1	1	5	2	1	....	1	1	4	....	1	....	....	....	....	....	....	....
34	39	22	30	31	33	21	23	10	26	14	16	5	6	7	2	....	1	2	1	....	....	16
6	4	5	8	9	7	2	12	1	5	5	....	1	1	....	....	1	....	....	....	....	....	....
8	8	6	6	12	8	6	3	5	12	6	6	2	1	2	....	....	....	....	....	....	....	4
5	4	1	6	2	4	4	1	6	3	2	....	....	....	....	....	....	....	....	....	....	....	1
15	7	11	4	2	12	6	3	6	9	3	1	....	2	....	....	....	1	....	....	....	....	....
3	6	2	2	5	1	2	2	2	....	1	4	....	1	1	1	1	....	....	....	....	....	....
8	8	1	1	1	3	2	1	1	4	3	4	1	1	....	....	....	....	....	....	....	....	....
8	18	19	20	16	14	15	20	11	18	15	9	6	8	2	1	....	....	1	....	....	....	2
3	6	1	2	3	3	4	1	1	2	1	....	1	1	1	....	1	....	1	....	....	....	3
29	21	26	26	20	25	20	22	22	12	8	14	12	4	10	3	1	....	....	....	....	....	193
3205	3417	2945	3009	2663	2559	2239	2041	1694	1905	1335	1190	791	661	499	274	164	61	35	21	8	2	463

Table 10—Births (exclusive of Still-births),

Birthplace of Father	Total	BIRTHPLACE														
		Canada										British Isles				
		Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Province not specified	England	Ireland	Scotland	Wales	Other
Canada	44785	29	218	200	2726	34290	255	105	43	42	647	3133	318	882	51	12
Prince Edward Island	67	10	7	3	4	24	3	....	....	....	....	6	....	4	....	....
Nova Scotia	353	4	98	14	16	146	4	1	....	1	1	37	3	7	....	....
New Brunswick	273	3	8	88	27	94	2	....	....	1	1	36	....	4	1	....
Quebec	3192	1	6	14	1464	1385	10	4	4	1	....	106	15	36	....	....
Ontario	39615	10	95	76	1197	32351	183	94	36	36	41	2793	275	796	50	12
Manitoba	265	1	1	2	5	136	46	4	....	1	2	19	5	4	....	....
Saskatchewan	59	....	1	....	1	36	3	2	....	....	....	7	1	2	....	....
Alberta	41	....	....	2	....	20	2	....	2	....	....	9	2	3	....	....
British Columbia	44	....	2	1	3	27	1	....	1	2	....	4	....	1	....	....
Province not specified	876	....	....	....	8	71	1	....	....	....	602	116	17	25	....	....
British Isles	13076	8	54	27	160	3819	63	12	5	9	290	5070	808	2222	133	21
England	8552	4	33	17	100	2721	41	8	2	3	215	4338	171	552	58	11
Ireland	1346	....	4	4	23	348	7	1	1	1	33	182	545	161	7	....
Scotland	2920	4	15	6	36	675	13	2	2	5	38	469	87	1486	18	4
Wales	227	..	2	....	1	64	2	1	....	....	4	73	4	19	50	....
Other	31	....	....	....	....	11	....	....	....	....	....	8	1	4	....	6
British Possessions	390	4	8	2	8	81	....	....	....	1	3	73	14	15	1	1
Newfoundland	201	4	7	1	5	29	....	....	....	....	2	30	3	8	....	1
Other	189	....	1	1	3	52	....	....	....	1	1	43	11	7	1	....
Europe	5865	2	10	3	71	605	61	29	8	4	51	177	19	46	3	....
Austria	290	....	2	1	3	22	10	4	2	2	2	3	....	....	....	....
Belgium	196	....	....	....	3	11	....	....	....	....	....	7	....	3	....	....
Denmark	63	....	....	....	2	13	....	....	....	....	....	7	2	4	....	....
Finland	382	....	....	....	1	27	....	....	....	1	1	4	....	....	1	....
France	53	....	....	....	7	20	....	....	1	....	....	5	2	2	....	....
Germany	144	....	....	....	2	65	....	1	....	....	2	8	1	1	....	....
Holland	133	....	....	....	....	21	....	1	....	....	2	12	....	1	....	....
Hungary	189	....	....	....	....	4	1	6	1	....	....	....	....	....	....	....
Italy	1393	2	2	....	19	177	1	2	....	....	16	34	5	12	....	....
Norway	61	....	....	1	2	16	1	....	....	....	2	4	....	1	....	....
Poland*	1078	....	2	....	9	64	16	3	....	....	6	15	1	2	....	....
Rumania†	270	....	1	....	6	21	5	7	3	....	2	8	....	3	....	....
Russia‡	931	....	2	1	8	66	19	5	1	....	16	32	1	8	2	....
Sweden	152	....	....	....	1	28	4	....	....	....	2	8	....	4	....	....
Other	530	....	1	....	8	50	4	....	....	1	....	30	7	5	....	....
Asia	186	....	1	2	5	21	2	....	....	1	2	4	....	3	....	....
China	37	....	....	....	....	6	1	....	....	1	....	2	....	2	....	....
Japan	8	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....
Other	141	....	1	2	4	14	....	....	....	....	2	2	....	1	....	....
United States	1794	....	10	9	110	1041	18	3	3	3	23	173	12	42	2	....
Various	27	....	1	....	2	8	....	....	....	....	1	3	....	....	....	....
Not specified	217	....	1	....	5	38	....	....	....	....	2	5	1	2	....	....
Children born to married mothers	66340	43	303	243	3087	39903	399	149	59	60	1019	3638	1172	3212	190	34
Children born to unmarried mothers	2170	1	14	6	127	1345	16	9	2	2	88	217	49	124	5	1
Children born to all mothers	68510	44	317	249	3214	41248	415	158	61	62	1107	3855	1221	3336	195	35

*Including Galicia.
†Including Bukovina.
‡Including the Ukraine.

Classified According to Birthplace of Parents, 1928—Ontario

OF MOTHER

British Possessions		Europe															Asia						
Newfoundland	Other	Austria	Belgium	Denmark	Finland	France	Germany	Holland	Hungary	Italy	Norway	Poland*	Rumania†	Russia‡	Sweden	Other	China	Japan	Other	United States	Various	Not specified
51	40	14	13	6	25	15	55	19	3	20	10	34	2	24	23	14	3	1	1	1388	4	69
1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	..	....
4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16	..	....
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	6	..	1
4	1	1	2	1	....	3	2	....	....	....	1	1	....	1	2	1	....	....	1	118	..	7
40	36	6	10	5	23	11	50	19	3	19	9	25	1	18	20	13	2	1	....	1196	4	59
....	1	3	....	....	1	1	2	....	....	....	....	4	1	2	1	....	....	....	....	21	..	1
....	....	2	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	2	..	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	..	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	..	....
1	1	1	1	....	1	....	....	....	....	1	....	3	....	3	....	....	....	....	....	23	..	1
45	41	2	3	3	4	8	10	8	....	3	3	7	1	9	4	8	....	....	1	200	7	8
39	30	1	3	3	2	7	7	7	....	2	2	5	1	5	2	7	....	....	....	144	4	7
1	4	1	....	....	1	1	....	....	....	....	....	1	....	1	....	....	....	....	....	18	..	1
5	5	....	....	....	1	....	3	1	....	1	1	1	....	3	2	1	....	....	1	33	2	....
....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5	1	....
....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	..	....
107	54	1	....	....	....	....	....	....	....	2	....	1	....	1	....	1	....	....	....	9	1	2
105	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4	..	2
2	54	1	....	....	....	....	....	....	....	2	....	1	....	1	....	1	....	....	....	5	1	....
1	7	262	171	30	361	16	75	87	180	1071	35	988	190	682	74	390	....	....	3	141	4	8
....	....	198	....	....	....	....	3	....	2	....	....	12	1	12	....	2	....	....	....	8	..	1
....	....	....	162	....	....	2	1	3	....	....	....	....	....	....	....	....	....	....	....	4	..	....
....	....	....	....	28	2	....	....	....	....	....	....	....	....	....	2	1	....	....	....	2	..	....
....	....	....	....	....	330	....	....	....	....	....	1	....	....	....	1	1	....	....	....	14	..	....
....	....	1	3	....	1	8	....	....	....	....	....	....	....	....	....	....	....	....	....	3	..	....
....	....	1	....	....	....	1	54	....	....	2	....	....	1	2	....	1	....	....	....	2	..	....
....	....	....	5	....	1	....	....	84	....	....	....	1	....	1	....	....	....	....	....	4	..	....
....	....	1	....	....	....	....	....	....	169	....	....	1	1	....	....	....	....	....	....	4	..	1
1	1	1	....	....	4	4	1	....	....	1069	2	1	1	....	....	....	....	....	1	33	3	1
....	....	....	....	1	1	....	1	....	....	....	27	....	....	....	2	....	....	....	....	2	..	....
....	1	10	....	....	2	....	1	....	3	....	....	844	11	62	....	9	....	....	....	16	1	....
....	1	7	....	....	....	....	3	....	....	....	....	28	148	19	....	5	....	....	....	3	..	....
....	2	36	....	....	3	1	5	....	1	....	1	91	25	578	1	5	....	....	1	19	..	1
....	....	....	....	....	16	....	....	....	....	....	4	....	....	....	68	1	....	....	....	16	..	....
....	2	7	1	1	1	....	6	....	5	....	....	10	2	8	....	365	....	....	1	11	..	4
....	....	....	....	....	....	2	....	....	....	....	....	1	....	....	....	2	22	5	101	11	1	....
....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	22	....	....	1	..	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	5	....	....	..	....
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	2	....	....	101	10	1	....
3	....	2	....	....	6	2	2	....	....	5	....	5	....	4	1	1	....	....	....	309	1	4
....	....	....	....	....	....	....	....	....	....	3	....	1	....	....	....	....	....	....	....	1	7	....
....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	2	..	160
207	142	281	187	39	396	43	142	114	183	1104	48	1038	193	720	102	416	25	6	106	2061	25	251
3	7	2	1	....	14	1	6	1	6	6	1	16	....	8	1	9	....	....	1	38	..	43
210	149	283	188	39	410	44	148	115	189	1110	49	1054	193	728	103	425	25	6	107	2099	25	294

Table 11—Births (exclusive of Still-births) Classified

Birthplace of Mother	Total	AGE OF															
		14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Canada	45265	3	46	165	472	1013	1513	1913	2186	2376	2522	2645	2493	2427	2317	2540	2116
Prince Edward Island	43	....	....	....	....	1	....	1	2	1	2	2	5	2	1	4	....
Nova Scotia	303	....	....	2	1	6	7	9	19	9	19	18	17	17	28	11	20
New Brunswick	243	....	....	....	2	3	4	8	15	9	14	15	12	15	17	20	14
Quebec	3087	....	2	15	26	69	67	110	114	151	168	152	173	162	155	178	147
Ontario	39903	3	43	144	421	870	1349	1689	1934	2084	2223	2344	2185	2133	2045	2236	1885
Manitoba	399	....	....	2	6	13	25	33	28	42	28	30	17	22	12	21	8
Saskatchewan	149	....	1	1	6	8	11	16	19	13	10	6	10	5	6	8	2
Alberta	59	....	....	....	2	3	4	7	4	1	4	8	4	3	6	1	4
British Columbia	60	....	....	....	1	7	3	5	4	2	2	5	7	5	4	6	1
Province not specified	1019	....	....	1	7	33	43	35	47	64	52	65	63	63	43	55	35
British Isles	13246	....	....	2	44	113	264	372	472	614	689	757	754	751	768	883	701
England	8638	....	....	2	32	80	172	242	322	411	432	465	453	458	518	559	461
Ireland	1172	....	....	....	....	7	16	34	32	51	69	73	67	78	63	91	54
Scotland	3212	....	....	....	10	24	71	91	115	144	181	202	218	203	180	216	171
Wales	190	....	....	....	2	1	4	5	3	6	4	13	14	10	7	14	15
Other	34	....	....	....	....	1	1	....	....	2	3	4	2	2	....	3	....
British Possessions	349	....	....	....	1	3	10	6	9	20	14	20	19	18	21	14	24
Newfoundland	207	....	....	....	....	1	3	4	7	13	9	16	14	10	12	8	13
Other	142	....	....	....	1	2	7	2	2	7	5	4	5	8	9	6	11
Europe	500	....	....	4	39	63	105	177	216	275	286	343	292	288	274	310	244
Austria	281	....	....	....	2	3	7	11	17	14	16	13	16	6	12	23	9
Belgium	187	....	....	....	....	4	2	8	10	5	7	16	8	10	12	12	11
Denmark	39	....	....	....	....	....	1	2	2	2	3	2	....	3	2	4	5
Finland	39	....	....	1	3	4	11	15	16	18	31	26	34	29	29	23	25
France	43	....	....	....	2	....	....	....	2	1	2	4	3	1	1	4	8
Germany	142	....	....	....	1	2	2	4	6	12	6	13	5	6	10	10	7
Holland	114	....	....	....	....	....	1	2	7	7	3	8	5	7	5	10	4
Hungary	183	....	....	....	1	3	1	4	6	9	9	14	9	17	15	9	13
Italy	110	....	....	3	13	17	22	28	39	42	56	61	53	61	58	55	60
Norway	48	....	....	....	1	1	1	....	2	3	4	4	....	5	5	1	4
Poland*	103	....	....	....	8	12	30	57	52	60	55	84	71	43	53	59	39
Rumania†	193	....	....	....	2	4	4	6	4	9	14	5	8	10	10	17	9
Russia‡	720	....	....	....	4	10	19	24	29	59	45	53	47	46	32	45	28
Sweden	102	....	....	....	1	1	....	6	1	9	9	9	5	8	8	3	7
Other	41	....	....	....	1	2	4	10	23	25	26	31	28	36	22	35	15
Asia	137	....	....	....	....	1	1	2	7	7	6	7	10	7	6	8	8
China	25	....	....	....	....	....	....	....	2	....	2	....	....	2	1	3	....
Japan	6	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....
Other	106	....	....	....	....	1	1	2	5	7	4	7	10	4	5	4	8
United States	2061	....	1	2	18	44	61	74	97	94	104	122	132	111	116	119	105
Various	25	....	....	....	....	1	....	1	1	1	....	1	1	1	5	1	2
Not specified	251	....	....	1	2	1	2	6	4	3	8	6	3	1	6	5	5
Total	66340	3	47	174	576	1239	1956	2551	2992	3390	3629	3901	3704	3604	3513	3880	3205

*Including Galicia.
†Including Bukovina.
‡Including the Ufkraine.

According to Age and Birthplace of Married Mothers, 1928—Ontario

MOTHER

30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 and over	Not stated
2272	1937	2038	1747	1697	1453	1364	1157	1250	889	799	559	442	333	198	111	42	18	15	6	.....	191
6	1	3	6	....	....	2	2	....	1	....	....	....	....	....	....	....	1	....	....	.....	.....
12	13	26	14	13	11	4	4	8	2	4	2	3	....	1	....	1	....	....	....	.....	2
15	14	8	9	8	5	5	11	5	2	6	4	....	1	1	....	....	....	....	....	.....	1
155	126	143	148	119	103	103	107	85	76	66	53	33	22	26	10	5	1	1	2	.....	14
2021	1726	1805	1511	1513	1284	1200	1015	1109	777	700	481	393	295	165	94	34	15	13	4	.....	160
16	9	9	13	9	11	10	2	10	6	4	2	2	4	2	1	....	1	....	....	.....	1
2	....	2	4	4	5	2	1	2	2	....	....	1	....	....	1	....	....	....	....	.....	1
1	2	1	1	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	.....	.....
1	3	....	....	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....
43	43	41	41	28	33	37	15	30	22	19	17	10	11	3	5	2	....	1	....	.....	12
745	700	639	615	551	487	442	364	402	290	244	164	147	118	53	27	10	10	3	2	.....	49
507	477	421	391	364	317	288	245	271	178	168	109	101	83	41	19	9	8	2	2	.....	30
67	58	49	52	51	53	38	29	41	32	20	17	11	7	3	....	....	1	1	....	.....	7
158	158	157	159	125	108	107	81	85	76	52	36	29	25	8	8	1	1	....	....	.....	12
12	5	11	11	8	7	8	7	4	4	3	2	6	3	1	....	....	....	....	....	.....	.....
1	2	1	2	3	2	1	2	1	....	1	....	....	....	....	....	....	....	....	....	.....	.....
30	13	23	16	17	12	8	10	11	7	7	3	5	2	2	1	....	1	....	....	.....	2
16	2	15	13	8	7	8	7	3	6	5	2	2	1	2	....	....	....	....	....	.....	.....
14	11	8	3	9	5	....	3	8	1	2	1	3	1	..	1	....	1	....	....	.....	2
256	194	200	196	188	180	161	109	185	107	98	39	45	32	15	17	7	5	3	....	2	51
17	8	19	10	12	7	13	9	11	5	7	....	3	1	2	2	....	1	....	....	1	4
15	10	2	6	2	3	10	5	11	1	4	2	3	3	4	....	....	....	....	....	.....	1
1	3	....	2	....	2	....	1	1	1	....	1	....	1	....	....	....	....	....	....	.....	.....
18	10	15	9	10	18	8	6	13	6	7	2	1	1	3	2	2	....	....	....	.....	.....
2	1	4	1	....	4	....	1	....	....	....	....	....	1	....	....	....	....	1	....	.....	.....
4	7	4	9	5	2	2	3	2	5	2	1	3	1	2	4	....	....	1	....	.....	1
7	6	5	3	5	5	6	....	4	6	2	3	....	....	....	....	....	....	....	....	.....	3
8	11	10	11	7	7	4	2	6	3	1	1	1	....	....	....	....	....	....	....	.....	1
58	63	40	38	50	53	46	29	40	30	26	13	9	15	2	4	2	2	1	....	1	14
3	....	2	2	1	1	4	....	1	....	....	1	2	....	....	....	....	....	....	....	.....	.....
60	30	44	46	36	32	29	16	38	20	19	7	12	7	2	....	3	2	....	....	.....	12
9	5	13	12	10	5	12	3	8	6	3	2	2	....	....	1	....	....	....	....	.....	.....
28	20	25	33	30	21	18	15	34	19	14	5	4	2	....	1	....	....	....	....	.....	10
1	4	2	1	6	4	3	3	7	2	1	....	1	....	....	....	....	....	....	....	.....	.....
25	16	15	13	14	16	6	16	9	3	12	1	4	....	....	3	....	....	....	....	.....	5
12	7	4	2	2	12	3	3	7	3	6	3	1	....	....	....	....	....	....	....	.....	2
1	3	....	1	....	6	1	1	....	....	....	1	....	....	....	....	....	....	....	....	.....	1
1	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	.....	1
10	3	4	1	2	6	2	2	6	3	5	2	1	....	....	....	....	....	....	....	.....	1
96	88	99	83	96	92	58	48	46	35	34	22	19	14	5	8	2	1	....	....	.....	15
2	1	....	1	1	....	....	2	2	....	....	....	1	....	....	....	....	....	....	....	.....	.....
4	5	6	3	7	3	5	1	2	4	2	1	1	....	1	....	....	....	....	....	.....	153
3417	2945	3009	2663	2559	2239	2041	1694	1905	1335	1190	791	661	499	274	164	61	35	21	8	2	463

Table 12—Marriages in Ontario by Months, 1928

		MONTHS											
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total for Province..	25,728	1,397	1,448	1,286	1,928	1,577	3,673	2,092	2,116	3,443	2,491	2,214	2,063

Table 13—Marriages—Conjugal Condition of Contracting Parties, Ontario, 1928

	Total marriages	MARRIAGES BETWEEN									Per cent. of Bridegrooms who were			Per cent. of Brides who were		
		Bachelors and			Widowers and			Divorced men and								
		Spinsters	Widows	Divorced	Spinsters	Widows	Divorced	Spinsters	Widows	Divorced	Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced
Total for Province.....	25,728	22,750	615	106	1,230	802	32	152	29	12	91.2	8.0	0 8	93.8	5.6	0.6

Table 14—Marriages reported in Rural and Urban parts of Counties, Ontario, 1928

COUNTIES	Total	Rural	Urban	COUNTIES	Total	Rural	Urban
Ontario	25,728	5,960	19,768	Manitoulin	57	57	.....
Addington	41	41	.....	Middlesex	899	156	743
Algoma	414	92	322	Muskoka	128	43	85
Brant	399	67	332	Nipissing	299	86	213
Bruce	252	168	84	Norfolk	174	116	58
Carleton	1,114	119	995	Northumberland	201	122	79
Cochrane	389	166	223	Ontario	446	135	311
Dufferin	84	61	23	Oxford	295	111	184
Dundas	84	84	.....	Parry Sound	142	91	51
Durham	135	65	70	Peel	162	107	55
Elgin	315	116	199	Perth	327	115	212
Essex	1,553	157	1,396	Peterborough	330	93	237
Frontenac	326	96	230	Prescott	180	123	57
Glengarry	85	61	24	Prince Edward	97	61	36
Grenville	97	60	37	Rainy River	73	11	62
Grey	420	207	213	Renfrew	335	164	171
Haldimand	141	102	39	Russell	107	83	24
Haliburton	34	34	.....	Simcoe	476	192	284
Halton	163	65	98	Stormont	256	56	200
Hastings	433	206	227	Sudbury	293	94	199
Huron	276	197	79	Thunder Bay	513	18	495
Kenora	100	10	90	Timiskaming	256	156	100
Kent	444	108	336	Victoria	146	71	75
Lambton	296	123	173	Waterloo	713	100	613
Lanark	194	60	134	Welland	700	141	559
Leeds	201	80	121	Wellington	406	144	262
Lennox	68	27	41	Wentworth	1,495	132	1,363
Lincoln	374	81	293	York	7,790	529	7,261

Table 15—Marriages—Ages of Bridegrooms and Brides, 1928—Ontario

| Age of Bridegroom | Total grooms | AGE OF BRIDE | | |

Table 16—Marriages—Denominations of Contracting Parties, 1928—Ontario

Denomination of Groom.	Total Grooms	DENOMINATION OF BRIDE																														
		Adventists	Anglicans	Baptists	Brethren	Christians	Christian Science	Church of Christ	Congregationalists	Disciples	Evangelicals	Friends	Greek Catholics	Greek Orthodox	Holiness Movement	Jews	Lutherans	Mennonites	Mormons	Pentecostal	Presbyterians	Protestants	Roman Catholics	Salvation Army	Unitarians	United Brethren	United Church	Oriental religions	No religion	Other sects	Not stated
Adventists	9	6	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	8	....
Anglicans	5,542	1	3,293	231	6	3	6	3	....	6	7	1	....	....	....	1	41	2	4	1	610	2	300	25	2	....	985	....	....	8	4
Baptists	1,404	....	231	645	5	2	1	2	....	1	2	....	....	....	....	....	15	2	3	....	119	1	53	5	....	....	310	....	....	6	1
Brethren	56	....	4	2	36	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	1	1	....	....	9	....	....	1	....
Christians	59	....	3	5	1	28	....	....	....	....	....	1	....	....	....	....	1	....	1	....	7	....	2	....	....	....	10	....	....	....	....
Christian Science	35	....	5	2	....	....	16	....	....	....	....	....	....	....	....	....	1	....	....	....	4	....	2	....	....	....	5	....	....	....	....
Church of Christ	29	....	5	....	....	1	....	15	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....	5	....	....	....	....
Congregationalists	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Disciples	37	....	3	2	....	....	....	....	....	10	....	....	....	....	....	....	....	....	....	....	11	....	....	1	....	....	10	....	....	....	....
Evangelicals	100	....	10	2	....	....	....	....	....	....	50	....	....	....	....	....	15	....	1	....	7	....	1	....	....	....	14	....	....	....	....
Friends	6	....	1	1	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....
Greek Catholics	20	....	3	....	....	....	....	....	....	....	....	....	15	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
Greek Orthodox	151	....	7	1	....	....	....	....	....	....	1	....	....	116	....	....	2	....	....	....	2	1	19	....	....	....	1	....	....	....	1
Holiness Movement	15	....	1	....	....	....	....	....	....	....	....	....	....	....	12	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Jews	606	....	4	1	....	....	....	....	....	....	....	....	....	....	....	592	....	....	....	....	3	....	3	....	....	....	3	....	....	....	....
Lutherans	900	....	63	16	....	....	1	....	....	....	15	....	....	....	....	....	661	3	....	....	35	2	40	....	....	1	60	....	....	3	....
Mennonites	118	....	3	2	....	....	....	....	....	....	3	....	....	....	....	....	6	94	....	....	2	....	....	....	....	....	8	....	....	....	....
Mormons	50	....	5	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	20	....	4	....	2	....	....	....	17	....	....	....	....
Pentecostal	32	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....
Presbyterians	4,038	2	707	173	1	5	6	4	....	3	8	1	1	....	1	....	50	4	6	4	2,147	....	197	5	....	....	705	....	....	7	1
Protestants	331	....	5	2	....	....	....	....	....	....	1	....	....	....	....	....	1	....	1	....	7	264	41	....	....	....	9	....	....	....	....
Roman Catholics	4,955	....	281	51	....	....	....	1	....	1	5	....	....	3	....	2	47	....	2	1	148	29	4,196	1	....	....	181	....	....	5	1
Salvation Army	117	....	8	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	95	....	....	6	....	....	....	....
Unitarians	10	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	2	....	....	....	....
United Brethern	12	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	3	2	....	....	....	....	....	....	....	....	5	....	....	....	....
United Church	6,938	2	960	313	7	13	10	6	....	15	11	2	....	....	2	1	48	12	11	5	551	3	208	12	....	1	4,725	....	....	16	4
Oriental religions — (Buddhists, Confucians, Mohammedans, Shintos Sikhs, Hindus)	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....
No religion	13	....	2	1	....	....	....	....	....	....	....	....	....	....	....	....	2	1	1	....	1	....	1	....	....	....	2	....	4	....	....
Other sects	132	....	14	3	....	....	1	....	....	....	....	....	....	....	....	....	7	....	....	....	6	....	6	....	....	....	15	....	....	81	1
Not stated	12	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	7
Total brides	25,728	11	5,627	1,465	57	52	41	31	....	36	104	7	16	119	15	596	896	120	51	40	3,675	302	5,076	145	2	2	7,089	1	4	128	20

Table 17—Marriages—Birthplace of Bridegrooms and Brides, 1928—Ontario

| Birthplace of Bridegroom | Total | BIRTHPLACE OF BRIDE | | |

Table 17—Marriages—Birthplace of Bridegrooms and Brides, 1928—Ontario—Continued

| Birthplace of Bridegrooms. | Total | BIRTHPLACE OF BRIDE | | |

Table 18—Marriages—Literacy of Bridegrooms and Brides in Ontario, Classified by Birthplace, 1928

Birthplace	Bridegrooms			Brides		
	Total	Illiterate	Per cent. Illiterate	Total	Illiterate	Per cent. Illiterate
Total	25,728	190	0.7	25,728	92	0.4
Canada	16,529	143	0.9	17,502	42	0.2
Prince Edward Island	13	.....	.....	3	.....	.....
Nova Scotia	144	.....	.....	120	.....	.....
New Brunswick	94	2	2.1	59	.....	.....
Quebec	817	22	2.7	663	13	2.0
Ontario	14,673	117	0.8	15,770	27	.....
Manitoba	134	1	0.7	145	.....	.....
Saskatchewan	38	.....	.....	64	.....	.....
Alberta	32	.....	.....	43	.....	.....
British Columbia	16	.....	.....	34	1	2.9
Province not specified	568	1	0.2	601	1	0.2
British Isles	5,580	3	0.1	5,268	1	§
England	3,478	3	0.1	3,080	1	§
Ireland	648	.....	.....	509	.....	.....
Scotland	1,364	.....	.....	1,598	.....	.....
Wales	88	.....	.....	81	.....	.....
Other	2	.....	.....	.....	.....	.....
British Possessions	129	.....	.....	127	.....	.....
Newfoundland	65	.....	.....	66	.....	.....
Other	64	.....	.....	61	.....	.....
Europe	2,303	39	1.7	1,918	48	2.5
Austria	118	6	5.1	122	6	4.9
Belgium	49	.....	.....	44	.....	.....
Denmark	54	.....	.....	34	.....	.....
Finland	272	4	1.5	313	4	1.3
France	15	.....	.....	14	.....	.....
Germany	87	2	2.3	83	2	2.4
Holland	37	.....	.....	20	.....	.....
Hungary	91	1	1.1	86	1	1.2
Italy	257	.....	.....	145	1	0.7
Norway	32	.....	.....	21	.....	.....
Poland*	532	10	1.9	514	13	2.5
Rumania†	113	6	5.3	72	4	5.6
Russia‡	321	7	2.2	237	10	4.2
Sweden	73	.....	.....	22	.....	.....
Other	252	3	1.2	191	7	3.7
Asia	62	.....	.....	28	1	3.6
China	26	.....	.....	4	1	25.0
Japan	2	.....	.....	2	.....	.....
Other	34	.....	.....	22	.....	.....
United States	1,118	5	0.4	865	.....	.....
Various	2	.....	.....	5	.....	.....
Not specified	5	.....	.....	15	.....	.....

*Including Galicia.
†Including Bokovina.
‡Including the Ukraine.
§Less than one-tenth of one per cent.

Table 19—Deaths of Children under One Year (exclusive of Still-births) in Ontario, by Months, Classified as Rural and Urban by Counties, 1928

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ontario	4,880	407	363	466	387	430	387	331	348	456	455	387	463
Rural	1,711	129	155	186	163	157	128	109	103	133	137	138	173
Urban	3,169	278	208	280	224	273	259	222	245	323	318	249	290
Addington	10	1	3		1					1			4
Rural	10	1	3		1					1			4
Algoma	74	6	6	1	7	6	10	5	10	7	7	5	4
Rural	20		1	1	3	4	2	1	2	1	3		2
Urban	54	6	5		4	2	8	4	8	6	4	5	2
Sault Ste. Marie, c	38	3	2		2	2	6	4	6	5	3	4	1
Blind River, t	13	3	3		1		2		1	1	1		1
Thessalon, t	3				1				1			1	
Brant	59	5	7	5	2	4	6	1	6	3	11	3	6
Rural	11			2					4	2	1		2
Urban	48	5	7	3	2	4	6	1	2	1	10	3	4
Brantford, c	45	5	7	3	2	3	5		2	1	10	3	4
Paris, t	3					1	1	1					
Bruce	43	4	4	3	7		4	3	2	5	3	4	4
Rural	27	4	3	1	4		2		1	3	2	4	3
Urban	16		1	2	3		2	3	1	2	1		1
Chesley, t													
Kincardine, t	8				1			3	1	1	1		1
Southampton, t	3			1	1		1						
Walkerton, t	3				1		1			1			
Wiarton, t	2		1	1									
Carleton	393	30	22	41	26	28	27	26	53	46	33	25	36
Rural	40	5	1	9	6	3	3	2	4	1		4	2
Urban	353	25	21	32	20	25	24	24	49	45	33	21	34
Ottawa, c	320	23	20	31	17	25	23	19	43	39	30	21	29
Eastview, t	33	2	1	1	3		1	5	6	6	3		5
Cochrane	193	20	12	8	16	12	12	12	20	31	11	25	14
Rural	115	10	5	7	10	7	5	6	10	19	5	22	9
Urban	78	10	7	1	6	5	7	6	10	12	6	3	5
Cochrane, t	17	2	1		3	1		1	3	3	2	1	
Iroquois Falls, t	4		2									1	1
Timmins, t	57	8	4	1	3	4	7	5	7	9	4	1	4
Dufferin	14	3	2	1	1		1	1	2	2			1
Rural	8	1	2				1	1	2				1
Urban	6	2		1	1					2			
Orangeville, t	6	2		1	1					2			
Dundas	18		2	2		3			1	1	3	2	4
Rural	18		2	2		3			1	1	3	2	4
Durham	37	6	4	2	1	7	3	2	4	1	2	3	2
Rural	23	3	4		1	5	1	1	3		1	2	2
Urban	14	3		2		2	2	1	1	1	1	1	
Bowmanville, t	8	2		1		1	2		1	1			
Port Hope, t	6	1		1		1		1			1	1	
Elgin	32	1	2	5	1	4	3	2	2	3	3	3	3
Rural	20	1	1	3	1	2	2	2	1	1	2	2	2
Urban	12		1	2		2	1		1	2	1	1	1
St. Thomas, c	12		1	2		2	1		1	2	1	1	1
Aylmer, t													
Essex	257	23	21	24	17	25	22	18	13	18	25	15	36
Rural	62	7	6	7	4	7	4	7	3	1	8	4	4
Urban	195	16	15	17	13	18	18	11	10	17	17	11	32
Windsor, c	108	9	10	10	8	10	10	4	5	9	10	2	21
Amherstburg, t	3		1			1					1		
Essex, t	3			1			1					1	
Ford City, t	25	4	1	5	2		4	1	3	1	1	1	2
Kingsville, t	3					2				1			
Leamington, t	3			1			1		1				
Riverside, t	4					1		1		1			1
Sandwich, t	21	3	3		2	3	1	1		1	2	2	3
Walkerville, t	25				1	1	1	4	1	4	3	5	5
Frontenac	64	6	5	8	3	4	6	7	4	4	4	6	7
Rural	20	2	2	2	1	2	3		1		1	3	3
Urban	44	4	3	6	2	2	3	7	3	4	3	3	4
Kingston, c	44	4	3	6	2	2	3	7	3	4	3	3	4
Glengarry	34	1	3	6	6	4	1		1	3	2	2	5
Rural	21	1	3	4	3	3	1		1	2	1		2
Urban	13			2	3	1				1	1	2	3
Alexandria, t	13			2	3	1				1	1	2	3
Grenville	13			1	1	1	3	2			1	2	2
Rural	10			1	1		2	2			1	1	2
Urban	3					1	1					1	
Prescott, t	3					1	1					1	
Grey	70	7	5	6	4	9	3	5	5	4	10	4	8
Rural	39	4	3	5	3	4	1	4	2	3	4		6
Urban	31	3	2	1	1	5	2	1	3	1	6	4	2
Owen Sound, c	18	2	2	1	1	3	2		2		2	2	1
Durham, t	2								1			1	
Hanover, t	8					2				1	4		1
Meaford, t	3	1						1				1	

Table 19—Deaths of Children under One Year (exclusive of Still-births) in Ontario, by Months, Classified as Rural and Urban by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Haldimand	29		3	1	5	6	5		1	1	1	4	2
Rural	19		2	1	4	3	3		1	1	1	1	2
Urban	10		1		1	3	2					3	
Dunnville, t.	10		1		1	3	2					3	
Haliburton	12		1		2	2			1	3	2	1	
Rural	12		1		2	2			1	3	2	1	
Halton	30	5	2	5	4	2	4		1	2	2	1	2
Rural	20	4	2	3	2	1	3			2	2		1
Urban	10	1		2	2	1	1		1			1	1
Burlington, t.	1						1						
Georgetown, t.	3			2		1							
Milton, t.	2				2								
Oakville, t.	4	1							1			1	1
Hastings	97	11	10	10	8	11	10	1	9	5	8	6	8
Rural	55	4	5	5	7	5	3		6	3	5	6	6
Urban	42	7	5	5	1	6	7	1	3	2	3		2
Belleville, c.	29	2	2	5	1	4	6	1	2	2	2		2
Deseronto, t.	3	1	2										
Trenton, t.	10	4	1			2	1		1		1		
Huron	35	1	3	3	3	4	8	3		1	1	3	5
Rural	30	1	3	3	2	4	5	3			1	3	5
Urban	5				1		3			1			
Clinton, t.													
Goderich, t.	1				1								
Seaforth, t.													
Wingham, t.	4						3			1			
Kenora	28		2	7	2	2	3	3		2	3	3	1
Rural	6			2			1	1			1		1
Urban	22		2	5	2	2	2	2		2	2	3	
Dryden, t.	1									1			
Keewatin, t.													
Kenora, t.	13		1	4	2	1		2			2	1	
Sioux Lookout, t.	8		1	1		1	2			1		2	
Kent	93	7	1	10	12	10	9	7	6	4	12	7	8
Rural	37	1	1	4	7	5	4	1	2	3	3	4	2
Urban	56	6		6	5	5	5	6	4	1	9	3	6
Chatham, c.	40	2		6	3	3	4	6	3		7	2	4
Blenheim, t.	2									1	1		
Dresden, t.	3				1	1							1
Ridgetown, t.	2	2											
Tilbury, t.	2				1							1	
Wallaceburg, t.	7	2				1	1		1		1		1
Lambton	67	7	7	9	4	3	5	5	5		10	9	3
Rural	31	4	2	6	2	2	3	2	2		5	3	
Urban	36	3	5	3	2	1	2	3	3		5	6	3
Sarnia, c.	30	3	4	2	1	1	2	2	2		5	5	3
Forest, t.	1											1	
Petrolia, t.	5		1	1	1			1	1				
Lanark	44	5	2	8	3	1	5	3	2	5	3	1	6
Rural	19	4	1	1			2	3	1		1	1	5
Urban	25	1	1	7	3	1	3		1	5	2		1
Almonte, t.	2			1							1		
Carleton Place, t.	5		1	1			1		1	1			
Perth, t.	7			1	2	1				2	1		
Smith's Falls, t.	11	1		4	1		2			2			1
Leeds	45	3	3	2	8	4	4	1	5	3	3	4	5
Rural	21	1	1	1	6	1	3	1	1		1	2	3
Urban	24	2	2	1	2	3	1		4	3	2	2	2
Brockville, t.	17	1	1	1	2	2			3	2	2	1	2
Gananoque, t.	7	1	1			1	1		1	1		1	
Lennox	10		2	2		2	1	1		1			1
Rural	7		2	2		2							1
Urban	3						1	1		1			
Napanee, t.	3						1	1		1			
Lincoln	65	7	3	8	6	7	5	4	5	3	6	7	4
Rural	12		1	3	1	3			1			1	2
Urban	53	7	2	5	5	4	5	4	4	3	6	6	2
St. Catharines, c.	50	7	2	5	5	4	4	2	4	3	6	6	2
Grimsby, t.	2							2					
Merritton, t.													
Niagara, t.	1						1						
Manitoulin	14		2	1	1	1	1		1	1	1	2	3
Rural	14		2	1	1	1	1		1	1	1	2	3
Middlesex	113	9	11	7	2	15	9	10	6	5	17	9	13
Rural	34	3	3	4	1	5	4	2		1	6	2	3
Urban	79	6	8	3	1	10	5	8	6	4	11	7	10
London, c.	76	5	8	3		10	5	8	6	4	10	7	10
Parkhill, t.													
Strathroy, t.	3	1			1						1		
Muskoka	28	2	2		1	3	2	5	2	7	2	2	
Rural	18		2		1	2	1	3	1	5	1	2	
Urban	10	2				1	1	2	1	2	1		

Table 19—Deaths of Children under One Year (exclusive of Still-births) in Ontario, by Months, Classified as Rural and Urban by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Muskoka—Continued													
Bracebridge, t.	3							1		2			
Gravenhurst, t.	2	1							1				
Huntsville, t.	5	1				1	1	1			1		
Nipissing	105	7	10	14	9	7	8	5	6	15	10	7	7
Rural	51	2	7	8	6	3	3	2	2	6	5	3	4
Urban	54	5	3	6	3	4	5	3	4	9	5	4	3
North Bay, c.	29	3	2	2	3	3	4	1	1	4	2	2	2
Mattawa, t.	5							1	1	3			
Sturgeon Falls, t.	20	2	1	4		1	1	1	2	2	3	2	1
Norfolk	32	3	3	2	1	3	5	3	2	2	2	4	2
Rural	21	2	2	1	1	2	3	3	1	1	1	2	2
Urban	11	1	1	1		1	2		1	1	1	2	
Simcoe, t.	11	1	1	1		1	2		1	1	1	2	
Northumberland	36		7	4	2	4	1	3	5	4	5	1	
Rural	26		5	3	2	3	1	3	2	3	3	1	
Urban	10		2	1		1			3	1	2		
Campbellford, t.	3		2							1			
Cobourg, t.	7			1		1			3		2		
Ontario	87	7	6	5	8	12	5	7	5	8	9	8	7
Rural	36	4	4	3	4	1	3	1	2	3	4	3	4
Urban	51	3	2	2	4	11	2	6	3	5	5	5	3
Oshawa, c.	48	2	2	2	4	9	2	6	3	5	5	5	3
Uxbridge, t.	2					2							
Whitby, t.	1	1											
Oxford	53	4	5	6	7	4	6	2	3	4	5	3	4
Rural	21	1	4	1	5	2	2	2	2			2	
Urban	32	3	1	5	2	2	4		1	4	5	1	4
Woodstock, c.	14	1		2	1	2	2			3	1		2
Ingersoll, t.	9						2		1	1	2	1	2
Tillsonburg, t.	9	2	1	3	1						2		
Parry Sound	35	3	4	3	6	6	2		1	3	2	2	3
Rural	30	2	4	3	4	5	1		1	3	2	2	3
Urban	5	1			2	1	1						
Parry Sound, t.	5	1			2	1	1						
Peel	28	4	5	1	2	4	5	2			3	1	1
Rural	20	3	3	1	2	4	2	2			2		1
Urban	8	1	2				3				1	1	
Brampton, t.	8	1	2				3				1	1	
Perth	35	1	4	2	6	2	5	2	2	3	5	1	2
Rural	12		2	2	2	1	2		1	1	1		
Urban	23	1	2		4	1	3	2	1	2	4	1	2
Stratford, c.	19	1	2		4	1	3	1	1	2	2		2
Listowel, t.													
Mitchell, t.	1							1					
St. Mary's, t.	3										2	1	
Peterborough	47	6	5	4		6	2	7	5	4	3	5	
Rural	17	4	1	1			2	4	3	1		1	
Urban	30	2	4	3		6		3	2	3	3	4	
Peterborough, c.	30	2	4	3		6		3	2	3	3	4	
Prescott	97	5	7	9	9	7	6	7	6	11	10	9	11
Rural	70	1	7	8	6	6	5	4	4	8	5	8	8
Urban	27	4		1	3	1	1	3	2	3	5	1	3
Hawkesbury, t.	22	3		1	3	1	1	2	2	3	3	1	2
Vankleek Hill, t.	5	1						1			2		1
Prince Edward	12	2		1	2	2		1		1	1		2
Rural	9	2		1	2	1		1			1		1
Urban	3					1				1			1
Picton, t.	3					1				1			1
Rainy River	26	5	2	3	1	1	2	3	1	1	5	1	1
Rural	13	2	2	2	1	1	1	1			2		1
Urban	13	3		1			1	2	1	1	3	1	
Fort Frances, t.	12	3		1			1	2	1	1	3		
Rainy River, t.	1											1	
Renfrew	100	8	11	10	7	7	5	6	11	11	11	4	9
Rural	55	3	6	6	4	6	3	1	6	6	6	2	6
Urban	45	5	5	4	3	1	2	5	5	5	5	2	3
Arnprior, t.	3		1			1					1		
Pembroke, t.	28	5	2	2	2		1	4	4	3	3	1	1
Renfrew, t.	14		2	2	1		1	1	1	2	1	1	2
Russell	57	3	4	6	5	7	4	6	3	8	3	4	4
Rural	45	2	2	6	5	6	3	5	2	5	2	4	4
Urban	11	1	2			1	1	1	1	3	1		
Rockland, t.	11	1	2			1	1	1	1	3	1		
Simcoe	103	13	13	9	9	11	8	6	3	7	8	5	11
Rural	49	5	5	5	7	6	2	1	2	3	3	4	6
Urban	54	8	8	4	2	5	6	5	1	4	5	1	5
Alliston, t.	2					1							1
Barrie, t.	10		2	1	1		2	3					1
Collingwood, t.	5	2					1				2		
Midland, t.	23	4	4	1	1	1	2	1	1	4	1	1	2
Orillia, t.	7	1		1		3	1				1		
Penetanguishene, t.	7	1	2	1				1			1		1

Table 19—Deaths of Children under One Year (exclusive of Still-births) in Ontario, by Months, Classified as Rural and Urban by Counties, 1928—Continued

Province and Counties	Total	MONTHS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Stormont	102	13	8	6	7	8	4	5	8	21	9	4	9
Rural	45	5	3	3	3	4	2	3	3	10	4	2	3
Urban	57	8	5	3	4	4	2	2	5	11	5	2	6
Cornwall, t.	57	8	5	3	4	4	2	2	5	11	5	2	6
Sudbury	149	10	8	14	8	13	17	9	16	15	16	4	19
Rural	81	7	3	10	5	9	10	5	5	3	10	3	11
Urban	68	3	5	4	3	4	7	4	11	12	6	1	8
Capreol, t.	7	2	2	.....	1	1	.....	.....	.....	1	.....	.....	.....
Chelmsford, t.	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Copper Cliff, t.	5	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....	2
Sudbury, t.	53	1	2	3	2	3	7	4	9	11	6	1	4
Thunder Bay	98	7	10	5	11	8	3	9	6	9	12	7	11
Rural	11	1	2	.....	1	.....	.....	2	.....	2	.....	.....	3
Urban	87	6	8	5	10	8	3	7	6	7	12	7	8
Fort William, c.	52	4	2	3	7	7	1	4	3	3	7	6	5
Port Arthur, c.	35	2	6	2	3	1	2	3	3	4	5	1	3
Timiscaming	66	6	2	5	6	6	2	5	4	7	4	10	9
Rural	34	2	1	2	4	1	1	2	2	4	2	8	5
Urban	32	4	1	3	2	5	1	3	2	3	2	2	4
Cobalt, t.	13	.....	.....	1	.....	2	1	2	1	1	.....	2	3
Haileybury, t.	11	3	.....	.....	2	1	.....	1	1	1	2	.....	.....
New Liskeard, t.	8	1	1	2	.....	2	.....	.....	.....	1	.....	.....	1
Victoria	26	2	4	2	3	5	2	2	.....	2	1	1	2
Rural	16	2	2	1	1	3	2	.....	.....	2	1	.....	2
Urban	10	.....	2	1	2	2	.....	2	.....	.....	.....	1	.....
Lindsay, t.	10	.....	2	1	2	2	.....	2	.....	.....	.....	1	.....
Waterloo	84	10	2	8	8	10	6	10	5	4	5	10	6
Rural	18	2	1	1	2	1	1	1	2	1	2	2	2
Urban	66	8	1	7	6	9	5	9	3	3	3	8	4
Galt, c.	18	2	1	.....	2	3	3	3	.....	.....	3	1	.....
Kitchener, c.	35	6	.....	5	2	4	1	5	3	1	.....	5	3
Elmira, t.	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Hespeler, t.	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Preston, t.	8	.....	.....	1	2	1	1	1	.....	.....	.....	1	1
Waterloo, t.	3	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....
Welland	132	12	12	19	5	11	14	13	7	13	7	7	12
Rural	47	3	4	10	2	2	4	6	2	5	1	5	3
Urban	85	9	8	9	3	9	10	7	5	8	6	2	9
Niagara Falls, c.	34	2	6	8	2	5	3	.....	1	3	2	.....	2
Welland, c.	26	5	1	1	.....	1	4	2	4	2	2	2	2
Bridgeburg, t.	4	.....	.....	.....	.....	.....	.....	2	.....	1	.....	.....	1
Port Colborne, t.	13	1	1	.....	.....	1	1	2	.....	2	1	.....	4
Thorold, t.	8	1	.....	.....	1	2	2	1	.....	.....	1	.....	.....
Wellington	61	4	7	4	3	8	9	8	4	.....	7	3	4
Rural	32	1	3	1	2	4	6	5	3	.....	4	2	1
Urban	29	3	4	3	1	4	3	3	1	.....	3	1	3
Guelph, c.	27	3	4	3	1	4	3	1	1	.....	3	1	3
Harriston, t.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mount Forest, t.	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Palmerston, t.	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Wentworth	217	15	19	31	17	10	6	14	13	28	21	19	24
Rural	24	.....	3	6	1	1	2	2	1	2	1	2	3
Urban	193	15	16	25	16	9	4	12	12	26	20	17	21
Hamilton, c.	190	15	15	25	16	9	4	12	12	25	19	17	21
Dundas, t.	3	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....
York	1,071	87	53	107	91	88	88	69	65	103	105	109	106
Rural	148	12	15	21	17	9	7	11	5	10	13	10	18
Urban	923	75	38	86	74	79	81	58	60	93	92	99	88
Toronto, c.	895	70	37	84	73	77	76	55	58	92	88	98	87
Aurora, t.	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mimico, t.	6	1	.....	1	.....	.....	1	.....	.....	1	1	1	.....
Newmarket, t.	3	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....
New Toronto, t.	9	.....	1	.....	1	1	1	2	2	.....	1	.....	.....
Weston, t.	9	3	.....	.....	.....	.....	2	1	.....	.....	2	.....	1

Table 20—Total Deaths (exclusive of Still-births) and Deaths in Public Institutions of Children under One Year of Age, Showing the Number Non-Resident in the Province of Ontario, 1928

	All deaths under one year						In Public Institutions					
	Total			Non-resident in province			Total			Non-resident in province		
	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.
Total in Province	4,880	2,735	2,145	27	15	12	1,551	872	679	23	14	9

Table 21—Total Deaths (exclusive of Still-births) and Deaths in Public Institutions and Towns of 5,000

Cities and Towns	All Deaths under One Year												Deaths		
	Total			Residents			Non-resident in City or Town where death occurred						Total		
							Resident in province			Non-resident in province					
	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F
Cities:															
Belleville	29	13	16	25	10	15	4	3	1				13	6	7
Brantford	45	25	20	41	24	17	4	1	3				35	17	18
Chatham	40	21	19	32	16	16	8	5	3				24	11	13
Fort William	52	33	19	44	28	16	7	5	2	1		1	24	17	7
Galt	18	14	4	17	13	4	1	1					12	9	3
Guelph	27	8	19	23	7	16	4	1	3				20	7	13
Hamilton	190	112	78	175	103	72	15	9	6				98	53	45
Kingston	44	22	22	32	16	16	12	6	6				28	15	13
Kitchener	35	22	13	32	20	12	3	2	1				18	12	6
London	76	49	27	64	42	22	12	7	5				46	29	17
Niagara Falls	34	18	16	32	17	15	2	1	1				9	4	5
North Bay	29	14	15	29	14	15							5	2	3
Oshawa	48	31	17	47	30	17	1	1					19	13	6
Ottawa	320	186	134	284	166	118	25	13	12	11	7	4	187	113	74
Owen Sound	18	8	10	14	8	6	4		4				7	1	6
Peterborough	30	18	12	27	17	10	3	1	2				17	11	6
Port Arthur	35	25	10	32	23	9	3	2	1				21	14	7
St. Catharines	50	32	18	41	25	16	9	7	2				33	22	11
St. Thomas	12	9	3	12	9	3							3	3	
Sarnia	30	9	21	28	8	20	2	1	1				10	1	9
Sault Ste. Marie	38	25	13	38	25	13							3	1	2
Stratford	19	8	11	18	7	11				1	1		14	6	8
Toronto	895	498	397	833	462	371	59	35	24	3	1	2	571	315	256
Welland	26	16	10	22	15	7	3	1	2	1		1	9	6	3
Windsor	108	62	46	88	51	37	18	10	8	2	1	1	57	35	22
Woodstock	14	10	4	11	7	4	3	3					8	7	1
Towns:															
Barrie	10	5	5	5	3	2	5	2	3				5	2	3
Brockville	17	11	6	12	7	5	4	3	1	1	1		16	10	6
Cobourg	7	5	2	6	4	2	1	1					2	2	
Collingwood	5	3	2	4	2	2	1	1					4	3	1
Cornwall	57	38	19	50	34	16	7	4	3				22	13	9
Eastview	33	18	15	33	18	15									
Ford City	25	11	14	25	11	14									
Hawkesbury	22	14	8	21	13	8				1	1		2	1	1
Ingersoll	9	6	3	8	5	3	1	1					3	1	2
Kenora	13	7	6	9	3	6	3	3		1	1		8	4	4
Lindsay	10	6	4	9	5	4	1	1					2	1	1
Midland	23	9	14	18	7	11	5	2	3				9	2	7
Orillia	7	3	4	6	2	4	1	1					4	2	2
Pembroke	28	11	17	21	7	14	6	4	2	1		1	9	4	5
Preston	8	6	2	8	6	2							1	1	
Smith's Falls	11	6	5	10	5	5	1	1					7	3	4
Sudbury	53	34	19	47	32	15	6	2	4				19	13	6
Trenton	10	7	3	10	7	3									
Walkerville	25	12	13	17	10	7	8	2	6				21	10	11
Waterloo	3	3		3	3										
Brampton	8	4	4	6	2	4	2	2					2	2	
Dundas	3	1	2	3	1	2									
Fort Frances	12	9	3	11	9	2	1		1				2	1	1
Leamington	3	2	1	2	1	1	1	1					1	1	
Mimico	6	2	4	5	2	3	1		1						
New Toronto	9	4	5	7	3	4	2	1	1				4	3	1
Port Colborne	13	8	5	13	8	5									
Renfrew	8		8	8		8									
Timmins	57	23	34	55	21	34	2	2					6	4	2
Whitby	1	1		1	1										

of Children under One Year of Age, Classified According to Residence in Cities Population and Over, Ontario, 1928

IN PUBLIC INSTITUTIONS									DEATHS ELSEWHERE THAN IN PUBLIC INSTITUTIONS											
Residents			Non-resident in City or Town where death occurred						Total			Residents			Non-resident in City or Town where death occurred					
			Resident in province			Non-resident in province									Resident in province			Non-resident in province		
Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F
9	3	6	4	3	1				16	7	9	16	7	9						
31	16	15	4	1	3				10	8	2	10	8	2						
16	6	10	8	5	3				16	10	6	16	10	6						
20	15	5	4	2	2				28	16	12	24	13	11	3	3		1		1
11	8	3	1	1					6	5	1	6	5	1						
16	6	10	4	1	3				7	1	6	7	1	6						
83	44	39	15	9	6				92	59	33	92	59	33						
20	10	10	8	5	3				16	7	9	12	6	6	4	1	3			
15	10	5	3	2	1				17	10	7	17	10	7						
34	22	12	12	7	5				30	20	10	30	20	10						
7	3	4	2	1	1				25	14	11	25	14	11						
5	2	3							24	12	12	24	12	12						
18	12	6	1	1					29	18	11	29	18	11						
152	93	59	25	13	12	10	7	3	133	73	60	132	73	59				1		1
3	1	2	4		4				11	7	4	11	7	4						
14	10	4	3	1	2				13	7	6	13	7	6						
18	12	6	3	2	1				14	11	3	14	11	3						
24	15	9	9	7	2				17	10	7	17	10	7						
3	3								9	6	3	9	6	3						
9	1	8	1		1				20	8	12	19	7	12	1	1				
3	1	2							35	24	11	35	24	11						
13	5	8				1	1		5	2	3	5	2	3						
513	281	232	55	33	22	3	1	2	324	183	141	320	181	139	4	2	2			
5	5		3	1	2	1		1	17	10	7	17	10	7						
37	24	13	18	10	8	2	1	1	51	27	24	51	27	24						
5	4	1	3	3					6	3	3	6	3	3						
1	1		4	1	3				5	3	2	4	2	2	1	1				
11	6	5	4	3	1	1	1		1	1		1	1							
1	1		1	1					5	3	2	5	3	2						
3	2	1	1	1					1		1	1		1						
15	9	6	7	4	3				35	25	10	35	25	10						
									33	18	15	33	18	15						
									25	11	14	25	11	14						
1		1				1	1		20	13	7	20	13	7						
3	1	2							6	5	1	5	4	1	1	1				
4		4	3	3		1	1		5	3	2	5	3	2						
1		1	1	1					8	5	3	8	5	3						
5	1	4	4	1	3				14	7	7	13	6	7	1	1				
3	1	2	1	1					3	1	2	3	1	2						
4	1	3	4	3	1	1		1	19	7	12	17	6	11	2	1	1			
1	1								7	5	2	7	5	2						
6	2	4	1	1					4	3	1	4	3	1						
14	11	3	5	2	3				34	21	13	33	21	12	1		1			
									10	7	3	10	7	3						
13	8	5	8	2	6				4	2	2	4	2	2						
									3	3		3	3							
			2	2					6	2	4	6	2	4						
									3	1	2	3	1	2						
1	1		1		1				10	8	2	10	8	2						
			1	1					2	1	1	2	1	1						
									6	2	4	5	2	3	1		1			
2	2		2	1	1				5	1	4	5	1	4						
									13	8	5	13	8	5						
									8		8	8		8						
4	2	2	2	2					51	19	32	51	19	32						
									1	1		1	1							

Table 22—Deaths of Children Under One Year (exclusive of Still-births) by Age at Death, 1928—Ontario

Ages		Total
All infants		4,880
	M	2,735
	F	2,145
Under 1 day		1,118
	M	634
	F	484
1 day		313
	M	182
	F	131
2 days		250
	M	151
	F	99
3 days		176
	M	98
	F	78
4 days		105
	M	53
	F	52
5 days		60
	M	26
	F	34
6 days		59
	M	30
	F	29
Under 1 week		2,081
	M	1,174
	F	907
1 week and under 2 weeks		251
	M	137
	F	114
2 weeks and under 3 weeks		186
	M	95
	F	91
3 weeks and under 1 month		187
	M	106
	F	81
Under 1 month		2,705
	M	1,512
	F	1,193
1 month and under 2 months		375
	M	219
	F	156
2 months and under 3 months		322
	M	192
	F	130
3 months and under 4 months		256
	M	139
	F	117
4 months and under 5 months		226
	M	127
	F	99
5 months and under 6 months		197
	M	107
	F	90
6 months and under 7 months		195
	M	111
	F	84
7 months and under 8 months		151
	M	79
	F	72
8 months and under 9 months		145
	M	77
	F	68
9 months and under 10 months		112
	M	65
	F	47
10 months and under 11 months		107
	M	60
	F	47
11 months and under 12 months		89
	M	47
	F	42

Table 23—Deaths of Children under One Year of Age (exclusive of Still-births) Classified According to Racial Origin of Decedents, 1928—Ontario

Racial Origin	Total
All origins	4,880
English	1,699
Irish	716
Scotch	558
Welsh	13
French	974
German	146
Armenian	3
Austrian	24
Belgian	20
Bulgarian	5
Chinese	5
Czech and Slovak	9
Danish	3
Dutch	39
Finnish	29
Greek	7
Hindu	...
Hungarian	30
Icelandic	...
Indian	69
Italian	123
Japanese	...
Jewish	19
Negro	29
Norwegian	9
Polish	82
Rumanian	17
Russian	32
Serb and Croat	4
Swedish	19
Swiss	2
Syrian	3
Ukranian*	44
Other	15
Not specified	133

*Including "Galician."

Table 24—Deaths of Children under One Year of Age (exclusive of Still-births) Classified According to Birthplace of Parents, 1928—Ontario

| BIRTHPLACE OF FATHERS | BIRTHPLACE OF MOTHERS | | |

| | | |

Table 25—Deaths of Children (exclusive of Still-births) from Certain Specified Causes in First Year of Life by Months, 1928—Ontario

Causes of Death	Total under 1 year			MONTH OF DEATH																							
				Jan.		Feb.		March		April		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
	T't'l	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All Causes	4880	2735	2145	235	172	218	145	272	194	216	171	240	190	217	170	187	144	171	177	258	198	263	192	208	179	250	213
7. Measles	12	7	5	....	1	....	....	1	1	....	1	1	1	....	....	....	....	1	....	....	....	1	....	....	1	3	....
8. Scarlet fever	4	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	2	....	1	....	....
9. Whooping-cough	114	49	65	4	7	4	....	....	7	3	9	9	5	6	8	4	3	3	2	6	5	4	8	4	2	2	9
10. Diphtheria	7	4	3	....	....	....	....	1	....	....	1	....	....	....	....	1	....	....	....	....	....	1	1	....	....	1	1
11. Influenza	144	88	56	4	5	9	2	3	8	4	2	8	4	14	2	1	5	....	....	1	1	2	....	6	3	36	24
16. Dysentery	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....
21. Erysipelas	24	13	11	1	....	....	2	1	1	2	1	2	3	4	1	....	1	....	....	1	1	....	....	1	1	1	....
22. Acute anterior poliomyelitis	3	1	2	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
24. Meningococcus meningitis	7	4	3	1	....	....	....	....	1	2	....	....	1	....	....	....	1	....	....	....	....	....	....	1	....	....	....
29. Tetanus	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
31. Tuberculosis of the respiratory system	7	3	4	....	1	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	1	....	....	1	2	....
32. Tuberculosis of the meninges and central nervous system	13	6	7	2	1	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	1	2	2	....	1	....	1
33–37. Tuberculosis, other forms	9	4	5	....	2	1	....	....	....	1	....	....	1	1	....	....	....	....	1	1	....	....	1	....	....	....	....
38. Syphilis	23	15	8	3	1	2	....	1	2	3	....	2	2	1	1	....	....	1	....	....	....	1	1	1	1	....	....
41. Purulent infection, septicaemia	21	9	12	....	1	1	....	....	1	1	2	1	1	1	1	1	....	....	....	1	....	1	3	1	1	1	2
56. Rickets	35	19	16	3	2	3	1	1	1	2	1	1	....	....	2	1	....	2	1	2	2	2	1	1	2	1	3
62. Diseases of the thymus	55	35	20	4	2	1	2	4	2	3	....	5	1	4	4	1	1	2	2	....	....	1	1	2	1	8	4
70. Encephalitis	6	4	2	....	....	....	1	....	....	2	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
71a. Simple meningitis	35	17	18	3	1	....	3	4	3	....	2	2	3	1	1	1	1	1	2	....	....	2	1	2	....	1	1
71b. Non-epidemic cerebrospinal meningitis	1	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
80. Convulsions	89	53	36	5	3	3	....	7	3	5	5	7	3	5	5	6	3	3	2	....	1	3	5	3	5	6	1
86. Diseases of the ear and of the mastoid process	36	24	12	1	1	4	....	3	3	1	2	1	2	1	1	....	1	2	....	3	....	3	1	3	1	2	....
87–90. Diseases of the heart	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
99. Bronchitis	29	14	15	....	1	1	1	1	2	4	1	4	2	1	2	....	....	....	2	....	....	....	1	2	1	1	2
100. Broncho-pneumonia	324	189	135	15	13	16	15	25	13	19	12	17	17	22	11	7	8	7	2	9	9	12	8	18	10	22	17
101. Pneumonia	215	125	90	20	4	11	7	19	13	8	13	10	10	10	8	7	2	3	5	7	5	8	10	3	5	19	8
110–112. Diseases of the stomach	54	31	23	2	....	3	1	3	2	4	2	3	1	1	1	4	6	3	1	....	4	4	2	3	3	1	....
113. Diarrhoea and enteritis	571	321	250	11	7	12	8	11	7	9	9	7	9	11	10	17	11	49	51	101	72	55	39	22	25	16	2
118. Hernia, intestinal obstruction	19	14	5	2	....	....	1	1	1	1	....	3	1	....	....	2	....	1	1	1	....	....	....	1	....	2	1
128. Nephritis	12	9	3	1	....	....	....	3	....	2	....	....	1	....	....	1	1	....	....	....	....	....	1	....	....	1	1
153. Acute abscess	9	5	4	....	....	....	1	1	....	1	1	2	1	....	....	1	1	....	....	....	....	....	....	....	....	....	....
159. Malformations	430	221	209	20	18	14	17	26	24	19	16	16	16	17	19	19	16	15	19	13	12	27	16	22	18	13	18
159a. Congenital hydrocephalus	23	9	14	2	1	....	3	....	3	3	1	....	....	....	2	2	1	....	....	1	....	1	2	....	1	....	....
159b. Congenital malformations of the heart	205	115	90	11	9	8	8	16	11	9	7	10	7	9	9	7	8	11	7	5	4	12	6	8	5	9	9
159c. Others under this title	202	97	105	7	8	6	6	10	10	7	8	6	9	8	8	10	7	4	12	7	8	14	8	14	12	4	9
160. Congenital debility icterus and sclerema	341	198	143	16	11	17	12	24	10	12	20	22	10	13	5	13	4	7	15	20	13	24	15	13	10	17	18
161a. Premature birth	1477	811	666	74	63	69	42	81	59	62	42	69	70	77	59	76	57	47	52	63	50	73	40	64	58	56	74

161B. Injury at birth	273	177	96	21	10	19	10	18	10	16	8	18	7	7	8	9	3	13	5	10	9	15	10	10	11	21	5
162. Other diseases peculiar to early infancy	230	121	109	10	7	13	5	12	13	16	13	12	11	6	10	9	9	4	8	9	3	11	12	11	8	8	10
162A. Specified diseases	221	117	104	9	6	12	5	12	11	15	13	11	11	6	10	9	9	4	8	9	3	11	11	11	8	8	9
162B. Unspecified causes under 3 months	9	4	5	1	1	1	....	....	2	1	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1
175–203. External causes	69	42	27	3	....	4	4	6	3	3	1	4	....	3	4	1	2	2	1	3	2	5	2	5	4	3	4
Other specified causes	166	91	75	8	9	9	8	13	3	8	5	12	8	8	6	5	6	5	4	5	8	5	8	9	4	4	6
204–205. Unspecified or ill-defined causes	14	9	5	1	1	2	....	1	....	1	....	1	....	....	1	....	....	....	1	2	....	1	....	....	1	....	1

Table 26—Deaths of Children (exclusive of Still-births) from

Causes of Death.	Total	TOTAL UNDER 1 YEAR		Under 1 day		1 day and under 1 week		1 week and under 2 weeks		2 weeks and under 3 weeks	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All Causes	4,880	2,735	2,145	634	484	540	423	137	114	95	91
7. Measles	12	7	5	....	....	....	....	....	....	....	....
8. Scarlet fever	4	....	4	....	....	....	....	....	....	....	....
9. Whooping-cough	114	49	65	....	....	....	....	....	....	....	2
10. Diphtheria	7	4	3	....	....	1	....	....	....	....	....
11 Influenza	144	88	56	....	....	2	1	....	3	2	3
16. Dysentery	2	1	1	....	....	....	....	....	....	....	....
21. Erysipelas	24	13	11	....	....	....	....	1	....	2	1
22. Acute anterior poliomyelitis	3	1	2	....	....	....	....	....	....	....	....
24. Meningococcus meningitis	7	4	3	....	....	....	....	....	....	....	....
29. Tetanus	....	....	....	....	....	....	....	....	....	....	....
31 Tuberculosis of the respiratory system	7	3	4	....	....	....	....	....	....	....	....
32. Tuberculosis of the meninges and central nervous system	13	6	7	....	....	....	....	....	....	....	....
33-37. Tuberculosis, other forms	9	4	5	....	....	....	....	....	....	....	....
38. Syphilis	23	15	8	....	....	1	1	2	1	....	1
41. Purulent infection, septicaemia	21	9	12	....	....	....	....	1	3	4	....
56. Rickets	35	19	16	....	....	....	....	....	....	....	....
62. Diseases of the thymus	55	35	20	2	2	8	6	5	....	2	3
70. Encephalitis	6	4	2	....	....	1	....	....	....	....	....
71A. Simple meningitis	35	17	18	....	....	1	1	1	1	2	....
71B. Non-epidemic, cerebrospinal meningitis	1	1	....	....	....	....	....	....	....	....	....
80. Convulsions	89	53	36	....	2	21	9	3	2	1	3
86. Diseases of the ear and of the mastoid process	36	24	12	....	....	....	....	1	....	....	....
87-90. Diseases of the heart	....	....	....	....	....	....	....	....	....	....	....
99. Bronchitis	29	14	15	....	....	....	1	1	....	....	1
100. Broncho-pneumonia	324	189	135	....	....	5	4	4	2	2	1
101. Pneumonia	215	125	90	....	1	7	6	4	2	3	3
110-112. Diseases of the stomach	54	31	23	....	....	2	1	3	....	1	....
113. Diarrhoea and enteritis	571	321	250	....	....	1	3	2	2	2	5
118. Hernia, intestinal obstruction	19	14	5	....	....	2	1	....	....	....	1
128. Nephritis	12	9	3	....	....	1	....	....	....	....	....
153. Acute abscess	9	5	4	....	....	....	....	1	....	2	2
159. Malformations	430	221	209	45	48	67	56	24	22	14	14
159A. Congenital hydrocephalus	23	9	14	3	5	2	....	....	2	....	....
159B. Congenital malformations of the heart	205	115	90	29	21	45	30	11	10	3	5
159C. Others under this title	202	97	105	13	22	20	26	13	10	11	9
160. Congenital debility, icterus and sclerema	341	198	143	24	20	35	28	15	13	12	11
161A. Premature birth	1,477	811	666	439	323	222	204	47	43	31	25
161B. Injury at birth	273	177	96	53	36	96	51	12	7	5	....
162. Other diseases peculiar to early infancy	230	121	109	51	45	53	39	8	8	4	8
162A. Specified diseases	221	117	104	50	42	51	39	8	7	4	8
162B. Unspecified causes under 3 months	9	4	5	1	3	2	....	....	1	....	....
175-203. External causes	69	42	27	15	5	2	2	....	1	....	....
Other specified causes	166	91	75	4	1	10	7	2	4	6	7
204-205. Unspecified or ill-defined causes	14	9	5	1	1	2	2	....	....	....	....

Certain Specified Causes in First Year of Life, by Ages, 1928—Ontario

AGE AT DEATH

3 weeks & under 1 month		1 month & under 2 months		2 months & under 3 months		3 months & under 4 months		4 months & under 5 months		5 months & under 6 months		6 months & under 7 months		7 months & under 8 months		8 months & under 9 months		9 months & under 10 months		10 months & under 11 months		11 months & under 12 months	
Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
106	81	219	156	192	130	139	117	127	99	107	90	111	84	79	72	77	68	65	47	60	47	47	42
....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	2	....	1	2	1	1	...	1	1
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	1	...	...	...	...	...	1
2	3	10	9	6	5	5	8	7	4	6	10	3	2	4	5	2	6	2	6	1	2	1	3
....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	1	1	...	1
1	3	9	3	11	7	8	7	8	4	7	7	8	2	7	3	6	4	10	2	5	5	4	2
....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
2	....	3	3	1	2	....	....	....	1	....	....	1	1	....	1	1	1	1	....	1	1	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....
....	....	....	....	1	....	....	1	....	....	....	....	1	....	....	....	1	....	....	2	1	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	1	....	....	1	....	....	....	1	1	....	....	....	1	....	1	1	..	....	....	....	....
....	....	....	....	....	....	....	....	1	3	....	1	2	....	....	....	....	....	....	2	1	1	2	....
....	....	....	....	2	....	1	1	....	3	....	....	....	....	....	....	....	....	....	....	1	1	....	....
....	....	4	2	2	1	3	1	....	....	....	....	1	....	....	....	1	....	1	1	....	....	....	....
....	1	2	....	....	2	1	1	....	....	....	1	1	3	....	1	....	....	....	....	....	....	....	....
....	....	2	1	....	2	3	....	1	3	2	3	4	1	2	2	....	....	2	1	1	2	2	1
3	....	5	....	2	2	3	4	1	....	1	2	1	....	1	....	....	1	....	....	1	....	....	....
....	....	....	....	2	1	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....
....	1	1	....	2	1	2	2	1	1	....	4	....	2	3	2	3	1	....	....	1	....	....	2
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
2	1	5	3	5	4	3	5	5	....	1	2	2	1	2	....	2	2	....	1	1	1	....	....
2	....	1	1	3	....	3	2	4	1	3	....	1	2	2	1	....	....	....	4	1	1	3	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	2	....	4	3	1	3	1	3	1	1	....	....	1	....	....	2	....	....	1	1	..	....	2
8	3	18	22	19	16	17	12	14	7	17	10	19	11	16	10	19	10	15	10	11	9	5	8
4	3	10	12	19	11	12	7	13	4	12	9	4	7	6	7	11	10	6	...	7	4	7	4
2	2	7	4	3	4	3	3	1	1	1	2	2	....	4	2	....	2	2	...	....	1	..	1
13	7	29	15	43	29	42	33	48	34	31	26	43	28	16	26	14	17	12	11	15	7	10	7
1	....	3	....	....	....	1	2	....	....	3	....	1	1	....	....	2	....	1	...	....	....	....	....
....	....	1	....	2	1	..	1	....	....	1	....	....	1	2	....	1	....	....	....	1	....	....	....
....	....	1	1	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
16	10	15	11	12	5	9	11	6	11	2	4	4	7	1	2	2	4	1	2	...	1	3	1
1	....	....	1	1	1	....	....	....	2	....	....	1	1	....	1	....	....	1	....	....	....	....	1
6	4	9	2	4	....	3	4	1	4	....	2	1	4	1	....	1	2	...	1	...	1	1	....
9	6	6	8	7	4	6	7	5	5	2	2	2	2	....	1	1	2	...	1	....	....	2	....
16	13	40	16	33	17	9	7	3	6	5	3	2	1	2	1	1	4	1	1	...	2	....	....
26	26	32	28	9	9	2	1	....	3	3	....	....	4	....	....	....	....	....	....	....	....	....	....
2	....	8	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
....	4	4	4	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	4	3	3	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	1	2	4	2	3	4	2	2	2	....	....	2	3	6	....	1	1	2	...	3	2	1	1
6	1	7	10	8	6	2	4	7	9	9	4	5	4	3	3	8	2	4	2	4	4	6	7
....	....	....	....	....	....	....	....	1	1	1	....	2	....	1	1	....	....	1	...	....	....	....	....

Table 27—Total Deaths (exclusive of Still-births) and Deaths in Public Towns of 5,000

Cities and Towns	All Deaths												Deaths		
	Total			Residents			Non-resident in City or Town where death occurred						Total		
							Resident in province			Non-resident in province					
	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F
Cities:															
Belleville	239	112	127	179	77	102	58	34	24	2	1	1	123	57	66
Brantford	403	188	215	356	167	189	46	21	25	1	....	1	203	91	112
Chatham	306	173	133	222	118	104	77	53	24	7	2	5	169	107	62
Fort William	211	125	86	185	108	77	25	17	8	1	....	1	113	76	37
Galt	181	100	81	155	82	73	26	18	8	....	....	....	81	46	35
Guelph	241	122	119	188	92	96	47	27	20	6	3	3	115	57	58
Hamilton	1471	765	706	1330	691	639	132	69	63	9	5	4	699	373	326
Kingston	445	214	231	297	135	162	143	74	69	5	5	....	272	136	136
Kitchener	293	146	147	231	115	116	57	27	30	5	4	1	138	72	66
London	1122	549	573	920	437	483	192	109	83	10	3	7	603	321	282
Niagara Falls	220	125	95	190	110	80	25	13	12	5	2	3	80	49	31
North Bay	129	74	55	108	61	47	21	13	8	....	....	....	37	22	15
Oshawa	227	117	110	207	105	102	20	12	8	....	....	....	99	50	49
Ottawa	1645	853	792	1394	710	684	153	86	67	98	57	41	866	468	398
Owen Sound	172	96	76	147	84	63	25	12	13	....	....	....	56	28	28
Peterborough	305	157	148	239	123	116	64	33	31	2	1	1	145	78	67
Port Arthur	222	132	90	172	100	72	42	25	17	8	7	1	113	69	44
St. Catharines	331	170	161	261	125	136	64	42	22	6	3	3	153	89	64
St. Thomas	214	102	112	186	90	96	23	10	13	5	2	3	84	41	43
Sarnia	216	110	106	188	95	93	26	13	13	2	2	....	75	38	37
Sault Ste. Marie	228	130	98	210	120	90	16	9	7	2	1	1	78	50	28
Stratford	199	103	96	177	91	86	20	10	10	2	2	....	92	49	43
Toronto	6962	3497	3465	6439	3204	3235	468	263	205	55	30	25	3370	1817	1553
Welland	155	92	63	119	75	44	33	16	17	3	1	2	74	38	36
Windsor	689	355	334	565	278	287	114	71	43	10	6	4	327	188	139
Woodstock	173	86	87	149	73	76	24	13	11	....	....	....	80	45	35
Towns:															
Barrie	120	57	63	82	41	41	38	16	22	....	....	....	52	27	25
Brockville	171	89	82	116	58	58	48	26	22	7	5	2	106	54	52
Cobourg	113	47	66	99	39	60	12	7	5	2	1	1	49	21	28
Collingwood	77	42	35	61	34	27	16	8	8	....	....	....	28	16	12
Cornwall	272	145	127	190	104	86	75	37	38	7	4	3	145	75	70
Eastview	75	41	34	75	41	34	....	....	....	....	....	....	....	....	....
Ford City	67	33	34	67	33	34	....	....	....	....	....	....	....	....	....
Hawkesbury	77	45	32	70	40	30	2	1	1	5	4	1	17	11	6
Ingersoll	89	33	56	79	29	50	9	4	5	1	....	1	24	8	16
Kenora	72	40	32	51	25	26	15	9	6	6	6	....	32	18	14
Lindsay	115	71	44	93	52	41	21	18	3	1	1	....	55	38	17
Midland	111	57	54	91	48	43	20	9	11	....	....	....	35	14	21
Orillia	135	73	62	106	54	52	29	19	10	....	....	....	62	36	26
Pembroke	182	92	90	117	59	58	48	23	25	17	10	7	98	49	49
Preston	53	31	22	43	28	15	9	3	6	1	....	1	2	1	1
Smith's Falls	109	55	54	86	43	43	22	11	11	1	1	....	47	26	21
Sudbury	200	139	61	135	90	45	61	46	15	4	3	1	114	85	29
Trenton	73	36	37	72	35	37	1	1	....	....	....	....	....	....	....
Walkerville	146	79	67	105	54	51	39	23	16	2	2	....	100	57	43
Waterloo	48	27	21	46	26	20	2	1	1	....	....	....	....	....	....
Brampton	80	41	39	67	31	36	12	9	3	1	1	....	23	15	8
Dundas	62	28	34	58	26	32	4	2	2	....	....	....	13	8	5
Fort Frances	67	48	19	53	37	16	11	9	2	3	2	1	21	14	7
Leamington	54	31	23	50	27	23	4	4	....	....	....	....	5	5	....
Mimico	66	27	39	61	24	37	5	3	2	....	....	....	32	15	17
New Toronto	27	13	14	23	11	12	4	2	2	....	....	....	10	5	5
Port Colborne	52	26	26	50	24	26	2	2	....	....	....	....	3	1	2
Renfrew	79	33	46	60	23	37	18	9	9	1	1	....	31	17	14
Timmins	178	114	64	165	103	62	13	11	2	....	....	....	36	25	11
Whitby	131	67	64	91	50	41	37	16	21	3	1	2	103	48	55

Institutions, Classified According to Residence of Decedents in Cities and Population and Over, Ontario, 1928

IN PUBLIC INSTITUTIONS									DEATHS ELSEWHERE THAN IN PUBLIC INSTITUTIONS											
Residents			Non-resident in City or Town where death occurred						Total			Residents			Non-resident in City or Town where death occurred					
			Resident in province			Non-resident in province									Resident in province			Non-resident in province		
Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F
66	22	44	56	34	22	1	1	....	116	55	61	113	55	58	2	....	2	1	....	1
161	74	87	41	17	24	1	....	1	200	97	103	195	93	102	5	4	1	....	....	....
88	54	34	75	51	24	6	2	4	137	66	71	134	64	70	2	....	2	1	....	1
91	62	29	22	14	8	....	....	....	98	49	49	94	46	48	3	3	....	1	....	1
57	29	28	24	17	7	....	....	....	100	54	46	98	53	45	2	1	1	....	....	....
64	28	36	45	26	19	6	3	3	126	65	61	124	64	60	2	1	1	....	....	....
572	303	269	122	67	55	5	3	2	772	392	380	758	388	370	10	2	8	4	2	2
138	65	73	130	67	63	4	4	....	173	78	95	159	70	89	13	7	6	1	1	....
91	49	42	46	22	24	1	1	....	155	74	81	140	66	74	11	5	6	4	3	1
420	214	206	175	104	71	8	3	5	519	228	291	500	223	277	17	5	12	2	....	2
54	37	17	21	10	11	5	2	3	140	76	64	136	73	63	4	3	1	....	....	....
22	13	9	15	9	6	....	....	....	92	52	40	86	48	38	6	4	2	....	....	....
80	38	42	19	12	7	....	....	....	128	67	61	127	67	60	1	....	1	....	....	....
639	334	305	141	80	61	86	54	32	779	385	394	755	376	379	12	6	6	12	3	9
35	17	18	21	11	10	....	....	....	116	68	48	112	67	45	4	1	3	....	....	....
89	50	39	56	28	28	....	....	....	160	79	81	150	73	77	8	5	3	2	1	1
79	47	32	29	17	12	5	5	....	109	63	46	93	53	40	13	8	5	3	2	1
94	51	43	56	36	20	3	2	1	178	81	97	167	74	93	8	6	2	3	1	2
61	31	30	21	10	11	2	....	2	130	61	69	125	59	66	2	....	2	3	2	1
55	26	29	19	11	8	1	1	....	141	72	69	133	69	64	7	2	5	1	1	....
64	42	22	13	8	5	1	....	1	150	80	70	146	78	68	3	1	2	1	1	....
73	38	35	17	9	8	2	2	....	107	54	53	104	53	51	3	1	2	....	....	....
2902	1549	1353	429	246	183	39	22	17	3592	1680	1912	3537	1655	1882	39	17	22	16	8	8
40	23	17	31	14	17	3	1	2	81	54	27	79	52	27	2	2	....	....	....	....
218	120	98	101	64	37	8	4	4	362	167	195	347	158	189	13	7	6	2	2	....
58	32	26	22	13	9	....	....	....	93	41	52	91	41	50	2	....	2	....	....	....
21	14	7	31	13	18	....	....	....	68	30	38	61	27	34	7	3	4	....	....	....
57	28	29	43	21	22	6	5	1	65	35	30	59	30	29	5	5	....	1	....	1
38	14	24	10	6	4	1	1	....	64	26	38	61	25	36	2	1	1	1	....	1
13	8	5	15	8	7	....	....	....	49	26	23	48	26	22	1	....	1	....	....	....
68	35	33	72	37	35	5	3	2	127	70	57	122	69	53	3	....	3	2	1	1
....	....	....	....	....	....	....	....	....	75	41	34	75	41	34	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	67	33	34	67	33	34	....	....	....	....	....	....
10	6	4	2	1	1	5	4	1	60	34	26	60	34	26	....	....	....	....	....	....
16	5	11	8	3	5	....	....	....	65	25	40	63	24	39	1	1	....	1	....	1
18	9	9	12	7	5	2	2	....	40	22	18	33	16	17	3	2	1	4	4	....
33	19	14	21	18	3	1	1	....	60	33	27	60	33	27	....	....	....	....	....	....
19	8	11	16	6	10	....	....	....	76	43	33	72	40	32	4	3	1	....	....	....
33	17	16	29	19	10	....	....	....	73	37	36	73	37	36	....	....	....	....	....	....
38	19	19	44	21	23	16	9	7	84	43	41	79	40	39	4	2	2	1	1	....
1	1	....	1	....	1	....	....	....	51	30	21	42	27	15	8	3	5	1	....	1
29	15	14	18	11	7	....	....	....	62	29	33	57	28	29	4	....	4	1	1	....
53	38	15	58	44	14	3	3	....	86	54	32	82	52	30	3	2	1	1	....	1
....	....	....	....	....	....	....	....	....	73	36	37	72	35	37	1	1	....	....	....	....
59	32	27	39	23	16	2	2	....	46	22	24	46	22	24	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	48	27	21	46	26	20	2	1	1	....	....	....
12	6	6	11	9	2	....	....	....	57	26	31	55	25	30	1	....	1	1	1	....
10	6	4	3	2	1	....	....	....	49	20	29	48	20	28	1	....	1	....	....	....
12	6	6	8	7	1	1	1	....	46	34	12	41	31	10	3	2	1	2	1	1
1	1	....	4	4	....	....	....	....	49	26	23	49	26	23	....	....	....	....	....	....
29	12	17	3	3	....	....	....	....	34	12	22	32	12	20	2	....	2	....	....	....
6	3	3	4	2	2	....	....	....	17	8	9	17	8	9	....	....	....	....	....	....
3	1	2	....	....	....	....	....	....	49	25	24	47	23	24	2	2	....	....	....	....
14	7	7	16	9	7	1	1	....	48	16	32	46	16	30	2	....	2	....	....	....
28	19	9	8	6	2	....	....	....	142	89	53	137	84	53	5	5	....	....	....	....
65	33	32	36	15	21	2	....	2	28	19	9	26	17	9	1	1	....	1	1	....

Table 28—Deaths (exclusive of Still-births) by Single Years of Age and by Age Groups—Ontario, 1928

AGES	Total	Male	Female
All ages	37,128	19,457	17,671
Under 1 year	4,880	2,735	2,145
1 year	587	311	276
2 years	319	165	154
3 "	237	126	111
4 "	164	98	66
Total, under 5 years	6,187	3,435	2,752
5 years	154	80	74
6 "	136	77	59
7 "	131	77	54
8 "	129	77	52
9 "	90	57	33
Total, 5-9 years	640	368	272
10 years	109	65	44
11 "	84	43	41
12 "	78	34	44
13 "	111	60	51
14 "	106	50	56
Total, 10-14 years	488	252	236
15 years	129	75	54
16 "	152	84	68
17 "	165	85	80
18 "	120	71	49
19 "	158	88	70
Total, 15-19 years	724	403	321
20 years	191	101	90
21 "	195	98	97
22 "	177	98	79
23 "	179	91	88
24 "	179	92	87
Total, 20-24 years	921	480	441
25 years	162	88	74
26 "	193	93	100
27 "	195	99	96
28 "	191	95	96
29 "	195	107	88
Total, 25-29 years	936	482	454
30 years	193	89	104
31 "	177	76	101
32 "	199	89	110
33 "	203	98	105
34 "	201	95	106
Total, 30-34 years	973	447	526
35 years	220	104	116
36 "	208	106	102
37 "	208	95	113
38 "	226	121	105
39 "	213	103	110
Total, 35-39 years	1,075	529	546
40 years	275	149	126
41 "	218	118	100
42 "	308	155	153
43 "	258	141	117
44 "	246	120	126
Total, 40-44 years	1,305	683	622
45 years	304	184	120
46 "	277	153	124
47 "	278	139	139
48 "	306	151	155
49 "	311	162	149
Total, 45-49 years	1,476	789	687
50 years	336	195	141
51 "	290	158	132
52 "	411	199	212
53 "	333	179	154
54 "	362	204	158
Total, 50-54 years	1,732	935	797
55 years	411	233	178
56 "	397	193	204
57 "	384	201	183
58 "	452	246	206
59 "	433	247	186
Total, 55-59 years	2,077	1,120	957
60 years	491	256	235
61 "	439	234	205
62 "	539	295	244
63 "	512	278	234
64 "	622	339	283
Total, 60-64 years	2,603	1,402	1,201
65 years	709	399	310
66 "	603	324	279
67 "	624	328	296
68 "	700	376	324
69 "	679	388	291
Total, 65-69 years	3,315	1,815	1,500
70 years	741	380	361
71 "	666	346	320
72 "	746	411	335
73 "	724	371	353
74 "	715	365	350
Total, 70-74 years	3,592	1,873	1,719
75 years	753	383	370
76 "	743	357	386
77 "	719	350	369
78 "	768	427	341
79 "	630	331	299
Total, 75-79 years	3,613	1,848	1,765
80 years	647	308	339
81 "	524	269	255
82 "	597	279	318
83 "	498	229	269
84 "	529	268	261
Total, 80-84 years	2,795	1,353	1,442
85 years	445	206	239
86 "	389	190	199
87 "	370	181	189
88 "	297	136	161
89 "	216	89	127
Total, 85-89 years	1,717	802	915
90 years	224	99	125
91 "	139	54	85
92 "	137	70	67
93 "	114	44	70
94 "	92	40	52
Total, 90-94 years	706	307	399
95 years	58	28	30
96 "	34	10	24
97 "	36	16	20
98 "	22	8	14
99 "	12	8	4
Total, 95-99 years	162	70	92
100 years and over	28	16	12
Not stated	63	48	15

Table 29—Deaths (exclusive of Still-births) Classified by Racial Origin of Decedents in Ontario, 1928

RACIAL ORIGIN	Total	Male	Female	RACIAL ORIGIN	Total	Male	Female
All origins	37,128	19,457	17,671	Hungarian	79	57	22
English	13,404	6,960	6,444	Icelandic	4	.....	4
Irish	8,449	4,243	4,206	Indian	441	210	231
Scotch	6,133	3,120	3,013	Italian	336	201	135
Welsh	149	95	54	Japanese	.....	.....	.....
French	3,296	1,774	1,522	Jewish	204	109	95
German	1,660	884	776	Negro	150	80	70
Armenian	13	8	5	Norwegian	51	31	20
Austrian	88	61	27	Polish	316	186	130
Belgian	52	26	26	Rumanian	60	43	17
Bulgarian	13	8	5	Russian	166	103	63
Chinese	57	50	7	Serb and Croat	29	21	8
Czech and Slovak	36	28	8	Swedish	88	52	36
Danish	25	16	9	Swiss	36	18	18
Dutch	580	324	256	Syrian	26	18	8
Finnish	192	127	65	Ukranian*	128	83	45
Greek	42	31	11	Other	34	16	18
Hindu	.....	.....	.....	Not specified	791	474	317

*Including Galician.

Table 30—Total Deaths (exclusive of Still-births) and Deaths in Public Institutions, Showing the Number Non-Resident in the Province, Ontario, 1928

	All Deaths						In Public Institutions					
	Total			Non-resident in province			Total			Non-resident in province		
	Total	M.	F.	Total	M.	F.	Total	M.	F.	Total	M.	F.
Total in Province	37,128	19,457	17,671	415	256	159	11,189	6,141	5,048	262	164	98

Table 31—Deaths (exclusive of Still-births) Classified According to Birthplace of Decedents for the Province of Ontario and for Cities and Towns of 10,000 Population and Over, 1928

| Province, cities and towns | Total deaths by sex | BIRTHPLACE OF DECEDENTS | | |

| | | |

Table 31—Deaths (exclusive of Still-births) Classified According to Birthplace of Decedents for the Province of Ontario and for Cities and Towns of 10,000 Population and Over, 1928—Continued

| Provinces, cities and towns | | Total deaths by sex | BIRTHPLACE OF DECEDENTS | | |

| | | |

Table 32—Deaths (exclusive of Still-births) Classified According to Birthplace of Parents of Decedents for Ontario, 1928

| BIRTHPLACE OF FATHER | Total | BIRTHPLACE OF MOTHER | | |

| | | |

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
DEATHS—ALL CAUSES. **Total**....		**37128**	**4880**	**587**	**319**	**237**	**164**	**640**	**488**	**724**	**921**	**936**	**973**	**1075**	**1305**	**1476**	**1732**	**2077**	**2603**	**3315**	**3592**	**3613**	**2795**	**1717**	**706**	**162**	**28**	**63**	
	M	19457	2735	311	165	126	98	368	252	403	480	482	447	529	683	789	935	1120	1402	1815	1873	1848	1353	802	307	70	16	48	
	F	17671	2145	276	154	111	66	272	236	321	441	454	526	546	622	687	797	957	1201	1500	1719	1765	1442	915	399	92	12	15	
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																													
Total.....		4738	400	170	93	90	75	213	144	232	332	297	288	241	274	218	226	204	202	225	217	233	178	116	50	8	3	9	
	M	2351	208	87	50	47	42	107	60	100	144	145	119	121	150	132	128	118	109	112	102	106	85	54	17	3	1	4	
	F	2387	192	83	43	43	33	106	84	132	188	152	169	120	124	86	98	86	93	113	115	127	93	62	33	5	2	5	
1. Typhoid and paratyphoid fever	M	54	....	....	....	....	....	2	1	7	7	11	3	5	2	4	1	5	1	1	3	1	....	....	....	....	....	....	1
	F	24	....	....	....	....	1	....	3	4	1	3	4	1	5	1	....	....	1	....	....	....	....	....	....	....	....	....	....	
1A. Typhoid fever.....	M	52	....	....	....	....	....	2	1	7	5	11	3	5	2	4	1	5	1	1	3	1	....	....	....	....	....	....	1A
	F	24	....	....	....	....	1	....	3	4	1	3	4	1	5	1	....	....	1	....	....	....	....	....	....	....	....	....	....	
1B. Paratyphoid fever.....	M	2	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1B
4. Undulant fever.....	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
5. Malaria.....	M	3	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	5
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
6. Small-pox.....	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	6
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
7. Measles.....	M	36	7	9	3	2	6	3	2	1	1	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	7
	F	26	5	10	4	1	....	3	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
8. Scarlet fever.....	M	23	....	3	3	2	3	7	3	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8
	F	44	4	3	4	4	2	12	3	1	6	1	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
9. Whooping-cough.....	M	78	49	13	6	4	3	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
	F	97	65	16	4	6	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	
10. Diphtheria.....	M	116	4	9	16	18	13	43	7	1	2	....	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	10
	F	97	3	14	10	14	7	30	8	3	1	....	2	....	1	2	....	....	....	....	1	....	....	....	....	....	....	1	
11. Influenza.....	M	801	88	31	13	8	9	16	14	16	17	23	13	28	45	32	35	32	49	55	64	78	69	47	15	3	1	....	11
	F	910	56	19	11	6	9	20	10	21	22	32	36	40	28	26	44	32	51	72	90	108	83	55	32	5	2	....	
11A. Influenza, sole cause.....	M	84	14	3	....	....	1	2	....	1	1	2	1	1	2	....	1	....	3	3	6	10	12	15	5	....	1	....	11A
	F	127	20	8	2	2	....	4	1	3	1	1	2	1	1	2	2	2	5	3	8	20	19	11	5	3	1	....	
11B. Influenza, with phthisis.....	M	10	....	....	1	....	....	....	....	....	....	1	1	....	....	2	....	1	....	2	1	1	....	....	....	....	....	....	11B
	F	7	....	....	....	....	....	....	....	1	....	1	1	2	1	....	....	....	1	....	....	....	....	....	....	....	....	....	
11C. Influenza, with bronchitis....	M	31	2	2	1	....	....	2	....	....	....	....	1	....	5	....	....	....	3	1	4	2	4	3	....	1	....	....	11C
	F	33	1	....	....	....	....	....	....	....	....	1	....	....	1	....	1	2	....	2	5	8	4	7	1	....	....	....	
11D. Influenza, with pneumonia...	M	436	60	19	6	4	6	9	9	11	11	14	9	23	22	23	21	19	25	35	27	35	28	14	6	....	....	....	11D
	F	435	28	6	5	2	3	8	5	12	13	12	19	23	16	17	28	15	26	37	46	37	36	23	17	....	1	....	
11E. Influenza, with other respiratory diseases.....	M	17	1	1	....	....	1	....	....	1	....	....	....	1	1	1	....	2	1	1	....	2	1	3	....	....	....	....	11E
	F	15	....	....	1	....	3	....	....	....	....	1	1	1	....	....	....	1	2	....	2	2	1	....	....	....	....	....	

11F. Influenza, with diseases and accidents of pregnancy and parturition	F	21								1	4	4	4	7	1															11F
11G. Influenza, with other causes	M	223	11	6	5	4	1	3	5	3	4	6	2	3	13	8	12	11	15	14	26	29	24	12	4	2				11G
	F	272	7	5	3	2	3	8	4	4	4	12	9	6	8	7	13	12	17	30	29	41	23	14	9	2				
12. Miliary fever	F	1																		1										12
13. Mumps	M	8	1					2	1	2											1		1							13
	F	9	1		2	1		1					1		1		2													
16. Dysentery	M	21	1	3	1	4		1	1				1			1			1		2	3	1	1						16
	F	10	1	1			2					1							1			2		2						
21. Erysipelas	M	51	13					1						3	3	3	2	5	1	3	5	5	5	2						21
	F	48	11		1			1	1			2	3	2		1	2	3	2	6	4	2	4	2	1					
22. Acute anterior poliomyelitis	M	16	1	1	2		2	2	3	2	2				1															22
	F	18	2	1	1	1	4	2	3	1					1				1		1									
23. Lethargic encephalitis	M	32				1		1	3	3	3	1	2	1		2	1	2	6	5	1									23
	F	18		1	2			1		2	1	1	1	1		1	3	2	1			1								
24. Meningococcus meningitis	M	31	4	3	1	1		6	4	2	2	4	1	1		2														24
	F	15	3	1		2	1		4		1			1			1	1												
25. Other epidemic and endemic diseases	M	4	2	2																										25
	F	7	2	4				1																						
25A. Chicken-pox	M	2	2																											25A
	F	5	2	2				1																						
25B. German measles	F	1		1																										25B
25C. Others under this title	M	2		2																										25C
	F	1		1																										
29. Tetanus	M	9		1	1		1	1	1	1								1	1		1									29
	F	8						2	4						1		1													
30. Mycoses	M	2	1																					1						30
	F	3	1															2												
31-37. Tuberculosis	M	898	13	9	4	7	4	19	18	60	100	103	87	76	86	70	70	56	34	31	19	12	5	1				4	31-37	
	F	944	16	13	3	8	5	23	43	94	152	110	107	68	76	46	41	41	33	27	18	10	5	2				3		
31. Tuberculosis of the respiratory system	M	753	3	2	2	2		7	9	45	90	98	77	71	80	58	67	49	29	30	15	11	3	1				4	31	
	F	776	4	6		4	1	5	32	76	137	102	95	64	65	38	28	33	28	24	16	9	5	1				3		
32. Tuberculosis of the meninges and central nervous system	M	36	6	7	1	3	2	5	2	3	2		2		1	1					1									32
	F	47	7	5	2	4	3	9	5	1	4	1	2		3		1													
33. Tuberculosis of the intestines and peritoneum	M	24				1	1	3	1	3	2	2			1	2		4	1	1			2							33
	F	47	2	1				3	2	6	7	3	4	2	2	3	4	5	2			1								
34. Tuberculosis of the vertebral column	M	22						2	3	3		1	1	3	2	2	2	1	1		1									34
	F	10						1	1						1	1	1		1	2	1									
35. Tuberculosis of the joints	M	10						1	1	2			2		1	2	1													35
	F	6							1	1	1						2		1											
36. Tuberculosis of other organs	M	17	1						1	2	2	1	3	2		1		1			2	1								36
	F	24						1	1	4	1	2	3	2	2	2	2	2		1				1						
36A. Tuberculosis of the skin and sub-cutaneous cellular tissue	F	2													1									1						36A
36B. Tuberculosis of the bones (vertebral column excepted)	M	3								1	1							1												36B
	F	2															1			1										
36C. Tuberculosis of the lymphatic system (mesenteric, and retroperitoneal glands excepted)	M	3	1						1													1								36C
	F	5						1		1			2			1														

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
36D. Tuberculosis of the genito-urinary system	M	11	....	....	....	....	....	....	....	1	1	1	3	2	....	1	....	....	....	....	2	....	....	....	....	....	....	....	36D
	F	13	....	....	....	....	....	....	1	3	....	2	1	2	1	....	1	2	....	....	....	....	....	....	....	....	....	....	
36E. Tuberculosis of organs other than above	F	2	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	36E
37. Disseminated tuberculosis	M	26	3	....	1	1	1	1	1	2	4	1	2	....	1	4	....	1	3	....	....	....	....	....	....	....	....	....	37
	F	34	3	1	1	....	1	4	1	6	2	2	2	....	3	2	3	1	1	....	1	....	....	....	....	....	....	....	
37A. Disseminated tuberculosis, acute	M	16	3	....	1	1	....	....	1	1	1	1	1	....	....	4	....	....	2	....	....	....	....	....	....	....	....	....	37A
	F	19	1	1	1	....	....	3	1	5	1	1	....	....	1	1	2	....	1	....	....	....	....	....	....	....	....	....	
37B. Disseminated tuberculosis, chronic or unstated	M	10	....	....	....	....	1	1	....	1	3	....	1	....	1	....	....	1	1	....	....	....	....	....	....	....	....	....	37B
	F	15	2	....	....	....	1	1	....	1	1	1	2	....	2	1	1	1	....	....	1	....	....	....	....	....	....	....	
38. Syphilis	M	83	15	1	....	....	....	....	1	1	2	1	4	1	8	11	9	10	10	7	1	1	....	....	....	....	....	....	38
	F	38	8	....	....	....	....	1	....	1	....	1	6	3	4	3	3	2	3	2	....	1	....	....	....	....	....	....	
40. Gonococcus infection	M	3	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	40
	F	5	1	....	....	....	....	....	....	1	....	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
41, Purulent infection, septicaemia	M	90	9	2	....	....	1	....	1	3	7	2	5	2	5	6	9	6	5	10	5	5	4	1	2	....	....	....	41
	F	63	12	....	1	....	1	5	4	4	4	1	6	....	6	4	1	2	1	4	2	3	1	1	....	....	....	....	
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.																													
Total		5094	127	28	13	9	9	43	38	44	67	57	76	138	236	338	408	556	654	728	636	512	242	103	22	6	....	4	
	M	2315	76	16	8	2	6	22	16	23	37	21	28	51	91	121	156	253	308	366	309	240	106	48	8	1	....	2	
	F	2779	51	12	5	7	3	21	22	21	30	36	48	87	145	217	252	303	346	362	327	272	136	55	14	5	....	2	
43-49. Cancer	M	1571	2	....	....	....	1	3	1	4	10	5	16	26	53	83	107	180	236	281	242	185	87	39	8	1	....	1	43-49
	F	1870	2	2	3	1	....	7	5	4	8	9	26	47	95	155	183	221	249	244	234	212	107	39	13	3	....	1	
43. Cancer of the buccal cavity	M	108	....	....	....	....	....	....	1	....	....	....	1	3	1	5	4	13	20	18	16	13	6	4	3	....	....	....	43
	F	24	....	....	....	....	....	....	....	....	....	....	....	....	1	....	3	1	1	3	6	....	6	2	1	....	....	....	
44. Cancer of the stomach and liver	M	644	1	....	....	....	....	....	....	....	....	1	2	7	21	33	49	76	96	135	97	76	33	15	1	....	....	1	44
	F	561	....	....	....	1	....	1	1	....	....	2	1	9	23	28	33	61	67	93	100	91	36	9	4	1	....	....	
45. Cancer of the peritoneum, intestines and rectum	M	284	....	....	....	....	....	....	....	....	1	2	4	5	14	14	13	40	43	42	49	41	12	3	1	....	....	....	45
	F	321	....	....	....	....	....	....	1	....	2	....	3	5	15	28	29	35	43	51	45	31	22	11	....	....	....	....	
46. Cancer of the female genital organs	F	337	....	....	....	....	....	....	....	1	....	4	12	18	24	41	46	51	49	34	22	25	7	1	1	....	....	1	46
47. Cancer of the breast	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	47
	F	342	....	....	....	....	....	....	....	....	1	....	6	9	19	41	45	48	53	37	25	30	16	8	3	1	....	....	
48. Cancer of the skin	M	43	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2	4	3	8	11	2	8	4	....	....	....	....	48
	F	29	....	....	....	....	....	....	1	....	....	1	....	1	2	....	4	1	1	....	2	8	3	3	2	....	....	....	

49. Cancer of other or unspecified organs	M	490	1				1	3		4	9	2	9	11	16	31	38	46	74	78	69	53	28	13	3	1			49
	F	256	2	2	3			6	2	3	5	2	4	5	11	17	23	24	35	26	34	27	17	5	2	1			
49A. Cancer of eye and ear	M	1																		1									49A
	F	9											1		2		1	1		1	1	1		1					
49B. Cancer of circulatory system	M	39					1		1	2	1	2	3	3	2	2	2	2	4	5	6	3	2						49B
	F	33		1	1				1			1			3	2	2	2	5	2	6	3	3	1	1				
49C. Cancer of respiratory system	M	71								1	1		1	3	2	11	7	10	16	9	6	2	1	1					49C
	F	45					1				1	1	1	2	4	5	7	2	8	6	5	2							
49. Cancer of digestive system	M	58								1	1	1	1	2	3	10	6	9	11	5	3	4	1					49D
	F	59											1	1	6	3	6	8	10	5	11	7	1						
49E. Cancer of genito-urinary organs	M	239								1		3	2	6	12	11	25	32	43	39	40	15	7	2	1			49E
	F	44	2	1	2		3					1		1	3	3	5	2	4	8	4	4		1				
49F. Cancer of bones and joints	M	24				1	2			2			1	2		1		4	3	3	2	1	2					49F
	F	20					1	1	3	1						2	1	4		2	3	1	1					
49G. Cancer of other specified organs	M	50	1						2	2		2	1	1	3	6	2	8	6	9	2	3	2					49G
	F	26					1			2	1	1		1		2	4	5	1	4	2	1			1			
49H. Generalized cancer	M	4														1		1		1	1							49H
	F	11											1	2		1	3	2		2			2		1			
49I. Unspecified	M	4															1					2		1				49I
	F	9														2		1	2	1	1	1	1					
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	23	1				1						1	1	2	2		2	3	2	6	1	1					50
	F	23					1							1	4	3			6	5	1		2					
51. Acute rheumatic fever	M	56			1		3	11	3	5	5	2		3	2	3	2	8	2	2	3			1				51
	F	67				1	1	5	12	7	7	5		5	4	5	1	1	4	6	1	1	1						
52. Chronic rheumatism, osteo-arthritis, gout	M	13									1				1	1	1	1	2	1	2	2	1					52
	F	22														1	1	3	3	4	6	1	3					
53. Scurvy	M	4	4																									53
54. Pellagra	M	1								1																		54
	F	2										1		1														
56. Rickets	M	31	19	10	1				1																			56
	F	20	16	4																								
57. Diabetes mellitus	M	180		1	2		1	1	9	6	5	4	3	5	7	3	14	19	21	22	26	19	9	3				57
	F	259		1				5	2	1	2	6	5	5	8	13	18	28	35	46	40	22	13	7	1	1			
58. Anaemia, chlorosis	M	164		1	1	1			1	2	3	1	1	1	4	9	6	18	19	35	30	22	6	2				1	58
	F	177		2			1			3	3	2	4	12	6	8	11	21	25	29	24	16	8	1				1	
58A. Pernicious anaemia	M	150				1					3			1	4	8	6	17	17	33	30	21	6	2				1	58A
	F	157		1						2	3		4	12	6	6	10	18	23	28	21	15	7					1	
58B. Other anaemias and chlorosis	M	14		1	1				1	2		1	1			1		1	2	2		1						58B
	F	20		1			1			1		2				2	1	3	2	1	3	1	1	1				
59. Diseases of the pituitary gland	M	2									1			1														59
	F	1															1											
60. Diseases of the thyroid gland	M	49			1				1	2	3	1	1	4	4	4	6	7	7	6		1		1				60
	F	231								3	8	10	7	15	21	24	32	27	25	23	15	13	5	3				
60A. Exophthalmic goiter	M	26								1	1	1		2	4	2	4	3	4	3		1						60A
	F	145								2	7	8	2	9	11	17	23	16	13	13	11	9	3	1				
60B. Other diseases of the thyroid gland	M	23			1				1	1	2		1	2		2	2	4	3	3				1				60B
	F	86								1	1	2	5	6	10	7	9	11	12	10	4	4	2	2				
61. Diseases of the parathyroid glands	M	7	6	1																								61
	F	6	5																			1						
62. Diseases of the thymus	M	37	35		1		1																					62
	F	24	20	2	1					1																		

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
63. Diseases of the adrenals (Addison's disease)	M	7											1				1	3	1	1								63
	F	3													2	1												
64. Diseases of the spleen	M	9						1		1			1		2	1		1	1	1								64
	F	6						1	1					1	1	1				1								
65. Leukaemia, lymphadenoma	M	58	1		1			3		3	5	2	3	2	7	3	3	6	9	7	1	2						65
	F	35	1		1	3	1	1	2	1		3	3		3	3		2	4	4	3							
65A. Leukaemia	M	33	1		1			3		2	2	1	1	2	4		1	4	4	4	1	2						65A
	F	25	1		1	3	1	1	2	1		1	2		1	3		2	2	2	2							
65B. Lymphadenoma (Hodgkin's disease)	M	25								1	3	1	2		3	3	2	2	5	3								65B
	F	10										2	1		2				2	2	1							
66. Alcoholism	M	67									2	4	2	7	10	9	11	9	7	4	1	1						66
	F	6											1			3	1		1									
66A. Delirium tremens	M	6														3	1		1			1						66A
	F	1														1												
66B. Acute alcoholism	M	49									2	4	2	6	8	6	6	5	5	4	1							66B
	F	5											1			2	1		1									
66C. Chronic alcoholism	M	12												1	2		4	4	1									66C
67. Chronic poisoning by mineral substances	M	4														2	1		1									67
67A. Chronic lead poisoning	M	3														1	1		1									67A
67B. Others under this title	M	1														1												67B
68. Chronic organic poisoning	M	2															1				1							68
	F	5											1		2			2										
68A. Chronic morphinism	M	1																			1							68A
	F	2																2										
68C. Other organic poisoning	M	1															1											68B
	F	3											1		2													
69. Other general diseases	M	30	8	3		1		2			1	2		1	1	1	1	1	1	2	2	2	1						69
	F	22	7	1		2		1		1	2	1		2	1		1				1		1			1		
69A. Diabetes insipidus	M	1										1																69A
	F	1									1																	
69B. Haemophilia	M	11	6	1				1												1	1		1					69B
	F	9	5							1		1		1									1					
69C. Purpura haemorrhagica	M	8	1	1		1		1			1	1							1		1							69C
	F	6	2					1			1			1	1													
69D. Others under this title	M	10	1	1										1	1	1	1	1		1		2						69D
	F	6		1		2											1				1				1			

CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																												
Total		2844	176	40	25	14	12	39	38	42	41	42	52	64	91	90	166	166	206	330	385	362	255	147	43	16	....	2	
	M	1421	106	23	11	6	8	17	13	21	20	24	27	34	42	45	81	85	110	171	188	186	118	57	19	8	....	1	
	F	1423	70	17	14	8	4	22	25	21	21	18	25	30	49	45	85	81	96	159	197	176	137	90	24	8	....	1	
70. Encephalitis	M	37	4	....	2	....	1	2	2	1	3	2	1	3	....	....	3	1	5	....	4	1	1	1	....	....	....	....	70
	F	29	2	....	2	2	....	1	3	....	....	2	4	3	1	2	2	2	....	2	1	....	....	....	....	....	....	....	
70A. Abscess of brain	M	10	1	....	....	....	....	1	1	1	2	....	1	1	....	....	....	....	....	....	1	....	....	1	....	....	....	....	70A
	F	6	1	....	1	....	....	....	1	....	....	....	2	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
70B. Encephalitis	M	27	3	....	2	....	1	1	1	....	1	2	....	2	....	....	3	1	5	....	3	1	1	....	....	....	....	....	70B
	F	23	1	....	1	2	....	1	2	....	....	2	2	3	1	2	2	1	....	2	1	....	....	....	....	....	....	....	
71. Meningitis	M	59	18	12	1	....	....	6	3	3	2	1	....	3	....	3	2	....	1	2	1	1	....	....	....	....	....	....	71
	F	56	18	6	4	3	3	3	3	2	3	2	1	1	....	....	....	....	2	1	3	....	....	....	1	....	....	....	
71A. Simple meningitis	M	57	17	12	1	....	....	6	3	3	2	1	....	3	....	3	2	....	1	2	....	1	....	....	....	....	....	....	71A
	F	56	18	6	4	3	3	3	3	2	3	2	1	1	....	....	....	....	2	1	3	....	....	....	1	....	....	....	
71B. Non-epidemic, cerebrospinal meningitis	M	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	71B
72. Tabes dorsalis (locomotor ataxia)	M	25	....	....	....	....	....	....	....	....	....	....	....	1	1	3	6	4	2	4	3	....	1	....	....	....	....	....	72
	F	4	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	2	1	....	....	....	....	....	....	....	....	
73. Other diseases of the spinal cord	M	113	1	....	....	....	....	1	1	4	1	2	1	1	7	5	7	8	11	25	19	15	4	....	....	....	....	....	73
	F	83	....	....	1	....	....	....	3	....	....	1	2	2	4	4	8	4	5	19	21	1	6	2	....	....	....	....	
74. Cerebral haemorrhage, apoplexy	M	658	5	....	....	....	....	....	....	2	3	1	4	8	14	15	21	39	59	91	122	121	83	46	16	7	....	1	74
	F	737	1	....	....	....	....	....	....	....	1	2	....	8	21	13	44	51	60	93	121	136	96	67	18	5	....	....	
74A. Apoplexy	M	301	....	....	....	....	....	....	....	....	....	....	1	1	7	5	7	16	30	44	62	53	39	24	11	1	....	....	74A
	F	346	....	....	....	....	....	....	....	....	1	2	....	4	1	5	15	22	22	43	63	75	51	33	8	1	....	....	
74B. Cerebral haemorrhage	M	310	5	....	....	....	....	....	....	1	2	....	3	6	7	7	13	20	22	41	52	62	40	17	5	6	....	1	74B
	F	345	1	....	....	....	....	....	....	....	....	....	....	4	15	6	25	26	33	44	51	58	40	29	10	3	....	....	
74C. Cerebral thrombosis and embolism	M	47	....	....	....	....	....	....	....	1	1	1	....	1	....	3	1	3	7	6	8	6	4	5	....	....	....	....	74C
	F	46	....	....	....	....	....	....	....	....	....	....	....	....	5	2	4	3	5	6	7	3	5	5	....	1	....	....	
75. Paralysis without specified cause	M	101	....	....	....	....	....	....	....	....	1	....	1	1	2	....	3	9	8	12	21	22	15	4	1	1	....	....	75
	F	139	....	....	....	....	....	....	....	1	....	....	1	2	2	5	7	5	12	13	24	23	25	13	3	3	....	....	
75A. Hemiplegia	M	63	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2	6	4	8	14	15	9	3	....	1	....	....	75A
	F	88	....	....	....	....	....	....	....	....	....	....	....	1	1	4	4	4	7	9	18	13	15	7	3	2	....	....	
75B. Others under this title	M	38	....	....	....	....	....	....	....	....	1	....	1	1	1	....	1	3	4	4	7	7	6	1	1	....	....	....	75B
	F	51	....	....	....	....	....	....	....	1	....	....	1	1	1	1	3	1	5	4	6	10	10	6	....	1	....	....	
76. General paralysis of the insane	M	44	....	....	....	....	....	....	....	....	....	....	4	3	3	4	12	5	1	5	3	2	1	1	....	....	....	....	76
	F	12	....	....	....	....	....	....	....	....	....	....	1	....	1	....	1	2	1	2	....	2	1	1	....	....	....	....	
77. Other forms of mental alienation	M	29	....	....	....	....	....	....	....	....	....	3	1	2	1	....	5	3	5	4	1	4	....	....	....	....	....	....	77
	F	53	....	....	....	....	....	1	....	....	3	....	2	4	5	6	8	4	6	11	1	1	....	....	....	....	....	1	
78. Epilepsy	M	82	....	....	2	3	1	2	2	4	4	6	10	4	4	3	7	6	2	10	4	2	4	1	1	....	....	....	78
	F	81	....	1	....	....	....	3	5	7	8	8	8	6	7	4	8	2	2	3	4	2	1	1	1	....	....	....	
79. Convulsions (non-puerperal, 5 years or over)	M	3	....	....	....	....	....	1	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	79
80. Infantile convulsions (under 5 years of age)	M	60	53	4	....	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	80
	F	44	36	4	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
81. Chorea	M	3	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	81
	F	8	....	....	1	....	....	1	2	1	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	
82. Neuralgia and neuritis	M	5	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	3	....	1	....	....	....	....	82
	F	10	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	2	1	2	1	1	1	....	....	....	....	

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
83. Softening of the brain	M	17																		3	2	4	6	1	1				83
	F	15														1			1	3	2	2	2	3	1				
84. Other diseases of the nervous system	M	114	1		2		2	1	3	4	1	8	4	5	8	9	14	9	14	15	6	6	2						84
	F	99	1	2	3		1	8	3	5		1	4	4	5	9	7	10	1	7	15	7	5	1					
85. Diseases of the eye and annexa	M	8			1		1					1				1						3		1					85
	F	3									1								1		1								
86. Diseases of the ear and of the mastoid process	M	63	24	7	3	1	2	4	1	2	4		1	3	1	1	1	1	2		1	2	1	1					86
	F	50	12	4	1	1		5	5	5	3	2	2		3				1	2	2	1		1					
86A. Diseases of the ear	M	37	14	6	3		1	2	1	1			1	2		1		1	1			2		1					86A
	F	28	7	2	1	1		4	4	3	2				1					1	1			1					
86B. Diseases of the mastoid process	M	26	10	1		1	1	2			1	4				1	1		1		1		1		1				86B
	F	22	5	2				1	1	2	1	2	2		2				1	1	1	1							
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.																													
Total		8880	3	3	2	5	5	24	32	53	60	73	87	117	168	271	368	543	818	1153	1367	1518	1184	692	267	52	8	7	
	M	4623	1	3	1	3	3	17	13	30	31	32	43	60	82	145	211	304	441	644	708	793	579	328	120	20	6	5	
	F	4257	2		1	2	2	7	19	23	29	41	44	57	86	126	157	239	377	509	659	725	605	364	147	32	2	2	
87-90. Diseases of the heart	M	2884		1	1	3	2	15	13	29	29	30	38	50	65	109	150	200	280	425	426	433	333	180	55	12	2	3	87-90
	F	2725			1	2	2	7	19	22	28	41	39	50	70	91	111	158	243	318	384	448	376	214	82	18	1		
87. Pericarditis	M	7									1		1		1	1			2			1							87
	F	6				1		1			1								1			1	1						
88. Endocarditis and myocarditis (acute)	M	97			1	1	1	5	6	4	6	8	5	6	9	7	2	9	9	6	5		6	1					88
	F	82					1	2	2	5	5	12	4	9	9	6	4	1	5	3	2	5	5	1	1				
88A. Acute endocarditis	M	53			1		1	4	5	3	5	7	3	4	2	4	2	6	2	2	1		1						88A
	F	36					1	2	1	3	4	8	1	4	2	3			3	1		3							
88B. Acute myocarditis	M	44				1		1	1	1	1	1	2	2	7	3		3	7	4	4		5	1					88B
	F	46							1	2	1	4	3	5	7	3	4	1	2	2	2	2	5	1	1				
89. Angina pectoris	M	499										2		12	10	17	30	52	77	99	82	61	40	12	3	1		1	89
	F	236												3	4	8	12	20	33	45	54	31	18	8					
90. Other diseases of the heart	M	2281		1		2	1	10	7	25	22	20	32	32	45	84	118	139	192	320	339	371	287	167	52	11	2	2	90
	F	2401			1	1	1	4	17	17	22	29	35	38	57	77	95	137	204	270	328	411	352	205	81	18	1		
90A. Valvular disease	M	432						1	2	6	9	4	12	14	15	18	31	30	26	66	79	57	40	17	3	2			90A
	F	458						1	4	6	4	8	14	11	16	17	21	25	36	56	55	87	51	24	20	2			
90B. Fatty degeneration of the heart	M	13														1		2	1	2	3		3	1					90B
	F	13													1	1	1	3	1	1	1	1	1	1	1				
90C. Aortic insufficiency	M	2															1						1						90C
	F	1										1																	

90D. Chronic endocarditis	M	298				1		3	3	12	6	9	9	6	10	9	15	16	28	40	38	51	18	21	3				90D
	F	364			1		1	2	5	8	12	11	8	13	17	16	20	24	35	39	47	41	39	20	3	2			
90E. Chronic myocarditis	M	1181		1		1	1	2	2	3	5	6	8	9	14	41	55	75	96	157	156	215	180	105	39	8	2		90E
	F	1218						1	6	1	2	4	9	10	13	32	41	69	103	139	178	223	208	122	44	12	1		
90F. Others under this title	M	355						4		4	2	1	3	3	6	15	16	16	41	55	63	48	45	23	7	1		2	90F
	F	347				1			2	2	4	5	4	4	10	11	12	16	29	35	47	59	53	38	13	2			
91. Diseases of the arteries	M	1649									1		3	3	12	31	52	97	144	213	274	352	242	148	63	8	4	2	91
	F	1462											2	5	13	32	38	71	125	184	264	271	227	148	65	14	1	2	
91A. Aneurysm	M	38									1				2	6	6	4	6	9	2	1	1						91A
	F	18												1		2	2	4	1	3	2	1		1	1				
91B. Arteriosclerosis	M	1595											3	3	9	23	46	92	137	201	270	349	240	146	62	8	4	2	91B
	F	1438											2	4	12	30	36	66	122	181	262	269	227	147	63	14	1	2	
91C. Other diseases of the arteries	M	16													1	2		1	1	3	2	2	1	2	1				91C
	F	6													1			1	2			1			1				
92. Embolism and thrombosis (not cerebral)	M	64	1							1	1	1	2	5	4	5	6	2	10	5	7	8	4		2				92
	F	35	2								1		2	1	2		4	4	4	3	5	4	1	2					
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	M	14						1				1		1	1		1	3	5		1								93
	F	25											1	1		3	3	3	3	3	6	2							
94. Diseases of the lymphatic system (lymphangitis, etc.)	M	7		2				1									2	1	1										94
	F	5													1			1	2	1									
95. Haemorrhage without specified cause	M	2					1							1															95
	F	4								1								2					1						
96. Other diseases of the circulatory system	M	3																1	1	1									96
	F	1															1												
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.																													
Total		3330	588	179	89	22	16	59	32	41	67	74	72	100	127	148	133	147	185	234	235	252	242	171	91	20	2	4	
	M	1776	336	98	40	9	11	31	11	27	36	47	33	54	87	94	80	85	114	122	117	113	116	71	31	10	2	1	
	F	1554	252	81	49	13	5	28	21	14	31	27	39	46	40	54	53	62	71	112	118	139	126	100	60	10		3	
97. Diseases of the nasal fossae and their annexa	M	8								2		1	1	2	1					1									97
	F	12	1	2							2	2	1	1	1	1				1									
98. Diseases of the larynx	M	14	2	4	2		2	1		1											1								98
	F	15	4		3			3			1					1	1			1	1								
98A. Laryngismus stridulus	F	1	1																										98A
98B. Laryngitis	M	9		2	2		1	1		1						1					1								98B
	F	10	1		2			2			1					1	1			1	1								
98C. Croup	M	5	2	2			1																						98C
	F	2	1					1																					
98D. Other diseases of the larynx	F	2	1		1																								98D
99. Bronchitis	M	64	14	2	1			2			1			2	4				4	1	4	7	11	6	3	1	1		99
	F	85	15	4	1	3				1						1	1			7	11	8	12	7	12	2			
99A. Bronchitis, acute	M	32	12	2	1			2			1			1	2				2	1	1	1	4	2					99A
	F	35	12	3	1	3											1				2	1	2	3	6	1			
99B. Bronchitis, chronic	M	22	1												1				2		3	4	4	2			1		99B
	F	33		1						1						1				5	6	5	8	2	4				
99C. Bronchitis, not otherwise defined, under 5 years of age	M	1	1																										99C
	F	3	3																										

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
99D. Bronchitis, not otherwise defined, 5 years or over	M	9	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	2	3	....	1	1	....	....	99D
	F	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	3	2	2	2	2	1	....	....	
100. Broncho-pneumonia (including capillary bronchitis)	M	515	189	60	19	4	2	6	4	4	6	6	5	8	12	12	11	10	14	25	28	33	26	20	7	3	....	1	100
	F	487	135	40	17	5	1	9	4	1	7	2	4	14	10	14	10	9	17	27	27	48	33	37	14	1	....	1	
100A. Broncho-pneumonia	M	508	186	59	19	4	2	6	4	4	6	6	5	7	12	12	11	10	14	25	28	33	26	18	7	3	....	1	100A
	F	481	132	40	17	5	1	9	4	1	7	2	4	14	10	14	10	9	17	26	27	47	33	36	14	1	....	1	
100B. Capillary bronchitis	M	7	3	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	2	....	....	....	....	100B
	F	6	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	1	....	....	....	....	
101. Pneumonia	M	946	125	24	15	4	4	19	5	16	23	33	25	36	53	64	52	63	76	77	66	53	61	34	15	2	1	....	101
	F	788	90	31	25	5	3	12	15	12	16	18	27	26	21	30	29	44	45	62	68	75	66	40	22	4	....	2	
101A. Pneumonia, lobar	M	519	32	7	5	2	1	12	3	12	13	25	22	27	34	47	30	43	51	55	32	30	25	7	3	1	....	....	101A
	F	384	17	10	12	3	2	6	8	7	9	13	19	18	12	21	19	23	28	36	33	39	25	15	8	....	....	1	
101B. Pneumonia, not otherwise defined	M	427	93	17	10	2	3	7	2	4	10	8	3	9	19	17	22	20	25	22	34	23	36	27	12	1	1	....	101B
	F	404	73	21	13	2	1	6	7	5	7	5	8	8	9	9	10	21	17	26	35	36	41	25	14	4	....	1	
102. Pleurisy	M	82	3	6	2	1	2	1	1	3	4	5	....	3	9	7	4	6	6	6	5	3	2	1	2	....	....	....	102
	F	50	2	2	3	....	....	2	2	....	3	3	2	4	4	2	3	2	4	6	2	2	....	2	....	....	....	....	
103. Congestion ahd haemorrhagic infarct of the lung	M	44	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	1	1	6	7	10	9	2	4	....	....	103
	F	66	3	1	....	....	....	....	....	....	....	....	1	....	1	2	5	....	3	3	4	3	14	12	11	3	....	....	
104. Gangrene of the lung	M	3	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	104
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
105. Asthma	M	52	1	....	....	....	....	....	....	....	1	....	1	....	2	5	6	4	9	5	4	7	4	1	2	....	....	....	105
	F	22	....	1	....	....	....	....	....	....	....	1	2	....	....	1	2	4	1	4	2	2	....	2	....	....	....	....	
106. Pulmonary emphysema	M	3	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	1	....	....	....	....	....	106
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
107. Other diseases of the respiratory system (tuberculosis excepted)	M	45	....	2	1	....	1	2	1	1	1	2	1	2	4	4	7	1	3	5	3	3	1	....	....	....	....	....	107
	F	27	2	....	....	....	1	2	....	....	2	1	2	1	3	1	1	3	1	1	3	1	1	....	1	....	....	....	
107A. Chronic interstitial pneumonia including occupational diseases of the lungs	M	4	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	1	....	....	....	1	....	....	....	....	....	....	107A
107B. Diseases of the mediastinum	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	107B
107C. Others under this title	M	40	....	2	1	....	1	1	1	1	1	1	1	1	4	4	7	....	3	5	3	2	1	....	....	....	....	....	107C
	F	27	2	....	....	....	1	2	....	....	2	1	2	1	3	1	1	3	1	1	3	1	1	....	1	....	....	....	
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.																													
Total		2660	690	100	42	39	20	95	56	71	64	65	83	96	123	121	136	144	137	185	125	118	83	45	17	5	....	....	
	M	1443	395	51	22	21	10	56	32	42	40	37	52	47	67	66	81	76	65	106	62	53	35	17	9	1	....	....	
	F	1217	295	49	20	18	10	39	24	29	24	28	31	49	56	55	55	68	72	79	63	65	48	28	8	4	....	....	

108. Diseases of the mouth and annexa	M	33	1	1	....	....	....	1	....	....	3	3	1	2	1	5	3	2	3	3	2	....	2	....	....	....	....	....	108
	F	20	2	1	....	....	1	1	....	....	....	1	....	2	4	1	1	2	....	1	....	1	1	1	....	....	....	....	
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	59	19	4	1	2	1	7	2	3	2	3	3	4	1	....	1	1	1	1	2	1	....	....	....	....	....	....	109
	F	68	9	7	2	3	1	6	1	5	2	3	4	1	5	3	3	....	3	3	1	4	1	1	....	....	....	....	
109A. Adenoid vegetations	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	109A
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	
109B. Pharynx and tonsils	M	58	19	4	1	2	1	7	2	3	2	3	3	4	1	....	1	1	1	1	1	1	....	....	....	....	....	....	109B
	F	67	9	7	2	3	1	6	1	5	2	3	4	1	5	3	3	....	3	3	....	4	1	1	....	....	....	....	
110. Diseases of the oesophagus	M	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	110
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	
111. Ulcer of the stomach and duodenum	M	161	1	....	....	....	....	....	....	....	7	7	11	9	19	19	20	19	8	21	10	7	2	1	....	....	....	....	111
	F	40	....	....	....	....	....	....	....	1	2	....	2	2	....	4	3	5	5	5	5	1	....	....	....	....	....	....	
111A. Ulcer of the stomach	M	84	....	....	....	....	....	....	....	....	3	3	2	4	12	8	10	11	5	12	5	6	2	1	....	....	....	....	111A
	F	26	....	....	....	....	....	....	....	1	....	....	1	2	....	4	2	4	4	3	1	3	1	....	....	....	....	....	
111B. Ulcer of the duodenum	M	77	1	....	....	....	....	....	....	....	4	4	9	5	7	11	10	8	3	9	5	1	....	....	....	....	....	....	111B
	F	14	....	....	....	....	....	....	....	....	2	....	1	....	....	....	1	1	1	2	4	2	....	....	....	....	....	....	
112. Other diseases of the stomach (cancer excepted)	M	108	29	2	1	1	1	2	1	....	....	1	2	3	4	2	3	12	7	10	10	7	6	2	1	1	....	....	112
	F	92	23	2	3	....	....	1	....	....	1	....	1	3	1	2	4	4	6	1	9	10	10	7	3	1	....	....	
113. Diarrhoea and enteritis (under 2 years of age)	M	359	321	38	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	113
	F	284	250	34	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
114. Diarrhoea and enteritis (2 years or over)	M	71	....	....	13	12	2	9	1	1	1	....	4	1	2	1	3	2	4	5	3	2	2	1	2	....	....	....	114
	F	88	....	....	13	9	5	7	1	....	....	....	3	6	5	2	1	3	4	5	3	8	6	4	1	2	....	....	
116. Diseases due to other intestinal parasites	M	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	116
116C. Nematodes (other than ankylostoma)	M	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	116C
117. Appendicitis and typhlitis	M	255	....	2	3	3	4	31	21	32	20	17	18	14	20	11	12	14	9	15	4	3	2	....	....	....	....	....	117
	F	178	1	2	2	5	2	17	18	20	14	8	8	15	12	9	8	13	7	8	3	4	2	....	....	....	....	....	
118. Hernia, intestinal obstruction	M	170	14	2	2	1	....	4	6	4	1	3	5	7	8	9	10	11	14	24	13	15	8	5	4	....	....	....	118
	F	143	5	....	....	....	1	4	2	1	1	6	6	5	10	8	14	10	11	13	15	13	8	7	3	....	....	....	
118A. Hernia	M	63	2	1	1	....	....	....	1	1	....	....	3	3	3	5	5	6	5	9	5	5	3	2	3	....	....	....	118A
	F	45	....	....	....	....	....	....	....	....	....	1	....	....	4	5	4	4	4	5	8	5	2	2	1	....	....	....	
118B. Intestinal obstruction	M	107	12	1	1	1	....	4	5	3	1	3	2	4	5	4	5	5	9	15	8	10	5	3	1	....	....	....	118B
	F	98	5	....	....	....	1	4	2	1	1	5	6	5	6	3	10	6	7	8	7	8	6	5	2	....	....	....	
119. Other diseases of the intestines	M	35	3	....	....	2	....	1	....	....	1	1	1	1	3	1	5	3	1	1	3	1	4	2	1	....	....	....	119
	F	31	2	....	....	....	....	1	1	1	....	1	....	2	2	2	3	3	3	3	1	....	4	....	1	1	....	....	
120. Acute yellow atrophy of the liver	M	4	2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	120
	F	11	....	1	....	....	....	....	....	....	1	2	3	....	1	....	1	....	....	....	....	1	....	....	....	....	....	....	
122. Cirrhosis of the liver	M	58	....	....	....	....	....	....	....	....	....	....	3	2	3	6	10	4	7	8	6	6	2	1	....	....	....	....	122
	F	46	....	....	....	1	....	....	....	....	1	....	1	2	2	5	2	9	7	4	6	1	3	2	....	....	....	....	
122A. Specified as alcoholic	M	3	....	....	....	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	122A
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
122B. Not specified as alcoholic	M	55	....	....	....	....	....	....	....	....	....	....	2	2	3	4	10	4	7	8	6	6	2	1	....	....	....	....	122B
	F	45	....	....	....	1	....	....	....	....	1	....	1	2	1	5	2	9	7	4	6	1	3	2	....	....	....	....	
123. Bilary calculi	M	15	....	....	....	....	....	....	....	....	....	....	....	....	2	2	3	....	1	2	1	2	1	1	....	....	....	....	123
	F	53	....	....	....	....	....	....	....	....	1	1	1	2	2	3	4	8	8	9	4	7	2	1	....	....	....	....	
124. Other diseases of the liver	M	64	2	....	....	....	....	....	....	....	1	1	4	3	....	6	8	4	7	9	6	5	4	3	1	....	....	....	124
	F	117	....	1	....	....	....	1	....	....	....	4	1	3	7	11	7	9	14	20	14	12	9	4	....	....	....	....	
125. Diseases of the pancreas	M	12	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	2	....	3	1	2	1	....	....	....	....	....	125
	F	15	....	....	....	....	....	....	....	....	....	1	....	2	2	1	2	1	1	5	....	....	....	....	....	....	....	....	

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
126. Peritonitis without specified cause	M	35	2	2	1	....	2	1	1	2	4	1	....	1	3	3	1	1	3	3	....	2	1	1	....	....	....	....	126
	F	30	3	1	....	....	....	1	1	1	1	1	1	4	3	4	2	1	2	2	1	....	1	....	....	....	....	....	
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																												
Total		2624	26	7	3	6	1	10	22	29	23	43	61	84	103	128	156	169	233	296	389	353	271	153	41	10	3	4	
	M	1517	16	3	2	4	1	5	9	10	11	14	23	31	41	52	88	89	133	183	256	229	179	99	28	5	2	4	
	F	1107	10	4	1	2	....	5	13	19	12	29	38	53	62	76	68	80	100	113	133	124	92	54	13	5	1	....	
128. Acute nephritis (including unspecified, under 10 years of age)	M	80	9	2	1	3	....	2	2	8	2	5	6	6	6	3	2	3	6	4	4	4	1	....	....	1	....	....	128
	F	66	3	1	1	....	....	2	4	6	2	5	4	4	6	2	5	3	4	2	5	4	2	....	1	....	....	....	
129. Chronic nephritis (Bright's disease)	M	946	....	1	....	1	....	1	6	2	8	5	14	22	29	38	71	72	102	127	146	129	100	56	11	2	....	3	129
	F	797	....	....	....	....	....	3	6	8	7	13	13	27	26	41	48	64	76	97	111	109	84	48	11	4	1	....	
131. Other diseases of the kidneys and annexa	M	73	4	....	1	....	....	2	1	....	1	1	2	3	4	3	7	2	5	7	15	4	4	4	3	....	....	....	131
	F	81	7	3	....	2	....	....	3	1	1	1	3	4	7	7	4	3	8	7	6	5	4	4	1	....	....	....	
132. Calculi of the urinary passages	M	22	....	....	....	....	1	....	....	....	....	....	....	....	2	2	1	1	3	5	1	3	1	1	1	....	....	....	132
	F	9	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	2	....	1	1	....	1	....	....	....	....	....	....	
133. Diseases of the bladder	M	56	....	....	....	....	....	....	....	....	....	1	....	2	....	4	3	....	1	4	16	10	11	4	1	....	....	1	133
	F	11	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	2	....	1	4	1	1	....	1	....	....	....	
134. Diseases of the urethra, urinary abscess, etc	M	10	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	2	3	1	....	1	1	....	....	....	....	....	134
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
134A. Stricture of the urethra	M	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	1	....	1	1	....	....	....	....	....	134A
134B. Other diseases of the urethra	M	4	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	2	....	....	....	....	....	....	....	....	....	134B
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
135. Diseases of the prostate	M	324	....	....	....	....	....	....	....	....	....	....	2	1	....	1	3	9	13	33	73	78	61	34	12	2	2	....	135
136. Non-venereal diseases of the male genital organs	M	6	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	....	....	136
137. Cysts and other benign tumours of the ovary	F	30	....	....	....	....	....	....	....	....	....	1	6	3	4	3	2	1	4	2	2	2	....	....	....	....	....	....	137
138. Salpingitis and pelvic abscess	F	21	....	....	....	....	....	....	....	....	2	....	6	4	3	2	2	1	1	....	....	....	....	....	....	....	....	....	138
139. Benign tumours of the uterus	F	39	....	....	....	....	....	....	....	....	....	....	2	2	5	7	8	2	2	....	4	6	....	....	1	....	....	....	139
140. Non-puerperal uterine haemorrhage	F	5	....	....	....	....	....	....	....	....	....	1	....	....	1	....	3	....	....	....	....	....	....	....	....	....	....	....	140
141. Other diseases of the female genital organs	F	46	....	....	....	....	....	....	....	....	1	1	1	6	4	8	8	6	4	6	....	1	....	....	....	....	....	....	141
142. Non-puerperal diseases of the breast (cancer excepted)	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	142

CLASS VIII.—THE PUERPERAL STATE.																												
Total		396	....	....	....	....	....	....	....	30	71	80	103	72	34	6	....	....	....	....	....	....	....	....	....	....	....	....	
143. Accidents of pregnancy	F	36	....	....	....	....	....	....	....	2	7	8	8	5	3	3	....	....	....	....	....	....	....	....	....	....	....	....	143
143A. Abortion	F	10	....	....	....	....	....	....	....	1	3	1	....	3	1	1	....	....	....	....	....	....	....	....	....	....	....	....	143A
143B. Ectopic gestation	F	15	....	....	....	....	....	....	....	....	1	6	5	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	143B
143C. Others under this title	F	9	....	....	....	....	....	....	....	1	2	1	2	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	143C
143D. Abortion, self-induced	F	2	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143D
144. Purperal haemorrhage	F	45	....	....	....	....	....	....	....	4	2	8	12	13	6	....	....	....	....	....	....	....	....	....	....	....	....	....	144
145. Other accidents of labour	F	51	....	....	....	....	....	....	....	2	5	12	17	6	9	....	....	....	....	....	....	....	....	....	....	....	....	....	145
145A. Caesarean section	F	19	....	....	....	....	....	....	....	....	1	3	8	3	4	....	....	....	....	....	....	....	....	....	....	....	....	....	145A
145B. Difficult labour	F	5	....	....	....	....	....	....	....	....	....	1	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	145B
145C. Other surgical operations and instrumental delivery	F	12	....	....	....	....	....	....	....	1	1	3	2	1	4	....	....	....	....	....	....	....	....	....	....	....	....	....	145C
145D. Uncontrollable vomiting	F	15	....	....	....	....	....	....	....	1	3	5	5	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	145D
146. Puerperal septicaemia	F	120	....	....	....	....	....	....	....	12	26	24	28	22	6	2	....	....	....	....	....	....	....	....	....	....	....	....	146
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	34	....	....	....	....	....	....	....	2	4	6	15	4	3	....	....	....	....	....	....	....	....	....	....	....	....	....	147
148. Puerperal albuminuria and convulsions	F	97	....	....	....	....	....	....	....	8	25	19	18	19	7	1	....	....	....	....	....	....	....	....	....	....	....	....	148
149. Following childbirth (not otherwise defined)	F	13	....	....	....	....	....	....	....	....	2	3	5	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	149
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																												
Total		211	26	2	....	....	....	1	1	3	4	1	4	2	3	5	4	9	16	13	25	32	38	12	6	4	....	....	
	M	119	12	2	....	....	....	1	1	2	2	....	2	....	1	4	2	5	8	9	17	16	21	7	5	2	....	....	
	F	92	14	....	....	....	....	....	....	1	2	1	2	2	2	1	2	4	8	4	8	16	17	5	1	2	....	....	
151. Gangrene	M	58	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	5	6	12	9	14	4	4	2	....	....	151
	F	44	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	4	2	6	10	12	5	1	2	....	....	
152. Furuncle	M	11	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	2	1	1	1	2	1	....	....	....	....	....	152
	F	7	3	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	1	1	....	....	....	....	....	
153. Acute abscess	M	27	5	2	....	....	....	1	....	1	1	....	2	....	1	2	1	2	2	1	2	2	....	2	....	....	....	....	153
	F	17	4	....	....	....	....	....	....	....	2	1	1	....	2	1	....	....	2	....	....	2	2	....	....	....	....	....	
154. Other diseases of the skin and annexa	M	23	7	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	1	2	3	6	1	1	....	....	....	154
	F	24	7	....	....	....	....	....	....	1	....	....	1	....	....	....	1	3	2	2	2	3	2	....	....	....	....	....	
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																												
Total		88	8	....	3	3	....	11	2	6	3	4	1	2	4	4	2	3	3	6	7	8	3	3	1	1	....	....	
	M	48	4	....	1	2	....	5	2	5	2	2	1	1	2	3	2	1	2	2	5	3	2	1	....	....	....	....	
	F	40	4	....	2	1	....	6	....	1	1	2	....	1	2	1	....	2	1	4	2	5	1	2	1	1	....	....	
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	35	3	....	1	2	....	5	2	3	1	2	....	....	....	2	1	1	1	2	3	3	2	1	....	....	....	....	155
	F	30	1	....	2	1	....	6	....	1	1	1	....	1	....	....	....	1	....	3	2	5	1	2	1	1	....	....	

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
156. Diseases of the joints (tuberculosis and rheumatism excepted)	M	11	1	....	....	....	....	....	....	2	....	....	1	1	2	1	1	....	1	....	1	....	....	....	....	....	....	....	156
	F	8	3	....	....	....	....	....	....	....	....	1	....	....	1	1	....	1	1	....	....	....	....	....	....	....	....	....	
158. Other diseases of the organs of locomotion	M	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	158
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	
CLASS XI.—MALFORMATIONS.																												
Total		485	430	15	6	2	1	8	6	7	3	3	....	....	....	....	1	2	....	....	....	....	....	....	....	....	....	1	
	M	249	221	6	4	1	1	6	2	4	1	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	..	
	F	236	209	9	2	1	...	2	4	3	2	1	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	1	
159. Congenital malformations (stillbirths not included)	M	249	221	6	4	1	1	6	2	4	1	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	159
	F	236	209	9	2	1	...	2	4	3	2	1	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	1	
159A. Congenital hydrocephalus	M	16	9	1	2	1	...	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159A
	F	17	14	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159B. Congenital malformations of the heart	M	129	115	3	2	....	....	3	1	3	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159B
	F	97	90	2	....	....	....	1	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159C. Others under this title	M	104	97	2	....	....	1	1	1	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	159C
	F	122	105	6	2	1	....	....	3	2	1	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	
CLASS XII.—DISEASES OF EARLY INFANCY.																												
Total		2323	2323	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	M	1309	1309	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	F	1014	1014	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
160. Congenital debility, icterus and sclerema	M	198	198	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	160
	F	143	143	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161. Premature birth, injury at birth	M	988	988	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161
	F	762	762	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161A. Premature birth	M	811	811	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161A
	F	666	666	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161B. Injury at birth	M	177	177	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161B
	F	96	96	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	

162. Other diseases peculiar to early infancy	M	121	121	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	162
	F	109	109	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
162A. Specified diseases	M	117	117	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	162A
	F	104	104	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
162B. Unspecified causes under 3 months	M	4	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	162B
	F	5	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
163. Lack of care	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	163
CLASS XIII.—OLD AGE.																													
Total		636	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	11	46	82	154	184	112	34	9	....	
	M	269	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	7	21	33	60	77	50	16	3	....	
	F	367	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	25	49	94	107	62	18	6	....	
164. Senility	M	269	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	7	21	33	60	77	50	16	3	....	164
	F	367	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	25	49	94	107	62	18	6	....	
CLASS XIV.—EXTERNAL CAUSES.																													
Total		2638	69	41	42	47	24	136	115	164	182	196	145	156	139	142	126	127	129	111	141	122	125	75	50	4	2	28	
	M	1911	42	22	25	31	16	101	92	139	155	157	118	129	118	123	102	98	98	73	76	67	42	36	18	3	2	28	
	F	727	27	19	17	16	8	35	23	25	27	39	27	27	21	19	24	29	31	38	65	55	83	39	32	1	....	....	
165-174. Suicides	M	207	....	....	....	....	....	....	1	9	9	13	13	22	18	22	27	20	16	14	12	7	....	....	1	....	....	3	165–
	F	78	....	....	....	....	....	....	1	4	8	14	9	10	6	5	5	5	4	5	2	....	....	....	....	....	....	....	174
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	13	....	....	....	....	....	....	....	....	1	2	1	2	3	1	....	....	1	1	....	1	....	....	....	....	....	....	165
	F	15	....	....	....	....	....	....	1	2	2	3	2	....	2	1	....	1	....	1	....	....	....	....	....	....	....	....	
166. Suicide by corrosive substances	M	13	....	....	....	....	....	....	....	1	....	....	1	3	1	2	1	1	2	....	1	....	....	....	....	....	....	....	166
	F	20	....	....	....	....	....	....	....	1	3	5	3	4	....	....	2	....	1	1	....	....	....	....	....	....	....	....	....	
167. Suicide by poisonous gas	M	15	....	....	....	....	....	....	....	....	....	1	2	2	1	1	3	1	1	1	2	....	....	....	....	....	....	....	167
	F	10	....	....	....	....	....	....	....	....	1	2	1	2	....	1	....	2	1	....	....	....	....	....	....	....	....	....	....	
168. Suicide by hanging or strangulation	M	67	....	....	....	....	....	....	....	3	3	4	3	6	9	8	10	5	4	7	3	2	....	....	....	....	....	....	168
	F	11	....	....	....	....	....	....	....	....	....	1	1	2	1	1	3	1	....	1	....	....	....	....	....	....	....	....	....	
169. Suicide by drowning	M	24	....	....	....	....	....	....	....	....	2	1	1	1	....	3	2	5	2	2	1	2	....	....	....	....	....	....	2	169
	F	9	....	....	....	....	....	....	....	....	1	2	2	1	....	....	....	1	....	2	....	....	....	....	....	....	....	....	....	
170. Suicide by firearms	M	52	....	....	....	....	....	....	1	4	3	4	4	7	3	5	5	5	3	3	3	1	....	....	....	....	....	1	170
	F	3	....	....	....	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
171. Suicide by cutting or piercing instruments	M	18	....	....	....	....	....	....	....	....	....	1	1	1	....	2	6	3	1	....	2	....	....	....	....	1	....	....	....	171
	F	4	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	1	....	....	....	....	....	....	....	....	....	....	
172. Suicide by jumping from high places	M	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	172
	F	5	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	
173. Suicide by crushing	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	173
	F	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
174. Other suicides	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	174
175. Poisoning by food	M	7	2	....	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....	....	175
	F	4	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	

TABLE 33—CAUSES OF DEATH BY SEX AND AGES—ONTARIO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																											
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
176. Poisoning by venomous animals	F	1											1															176
177. Other acute accidental poisonings (gas excepted)	M	16		4		5			1	1				1	1	1		1			1							177
	F	14	1	2	1							2		3		1					1	1	2					
178. Conflagration	M	32			1	1	5	9		1	1	2	1	1		1	2	2	2	1	1		1					178
	F	12		1				2	1	1	1		2		1	1						1	1					
179. Accidental burns and scalds (conflagration excepted)	M	62	3	10	8	2	1	8	3	2	2	3	4	6		2		1	1	1	3			1	1			179
	F	81	2	10	11	7	4	10	2	4		2	1	4	2		2	4	3	2	6		3	1	1			
180. Accidental mechanical suffocation	M	13	9							1	1	1									1							108
	F	15	13															1	1									
180A. Overlaying	M	4	4																									180A
180B. Asphyxia	M	9	5							1	1	1									1							180B
	F	15	13															1	1									
181. Accidental absorption of irrespirable or poisonous gas	M	27									3	1	2	1		2	6		5	1	1	2	2		1			181
	F	14								1	1		1	2	1		1	2		1	2		1		1			
182. Accidental drowning	M	329	1		5	9	3	37	51	46	57	30	16	15	8	12	6	7	5	3	5	4		1			8	182
	F	44		2	2	1		3	11	4	4	5	3	1	1	1	1	1	1		2	1						
183. Accidental traumatism by fire-arms	M	39						3	3	14	3	2		4	4		4		1								1	183
	F	1										1																
184. Accidental traumatism by cutting or piercing instruments	M	6								1	1			1			1			1	1							184
	F	1			1																							
185. Accidental traumatism by fall	M	187	3	2		1		6	5	9	9	5	11	11	13	11	6	9	12	12	14	11	16	7	1	1		185
	F	138	1			1				1	1	3	2		1	2	6	3	11	16	18	20	26	16	10			
186. Accidental traumatism in mines and quarries	M	68								2	4	21	7	14	8	5	1	2			1						3	186
	F	1												1														
186A. Coal mines	M	1									1																	186A
186B. Other mines	M	67								2	3	21	7	14	8	5	1	2			1						3	186B
	F	1												1														
187. Accidental traumatism by machines	M	51						1	2	2	3	8	3	4	6	2	9	4	5	1	1							187
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	623	3	3	6	13	5	34	21	41	51	55	44	39	49	49	33	39	38	31	26	19	11	4	1		8	188
	F	152	2	1	1	6	4	18	6	7	10	10	4	3	7	8	7	13	9	11	14	6	2	3				
188A. Railroad accidents	M	145	1	2				2	3	8	15	14	16	14	20	12	5	12	6	3	2	3	2				5	188A
	F	23	1		1			1	3	1	2	2	1			2		3	3	3								
188B. Street car accidents	M	14											1			2		2		3	2	2	1	1				188B
	F	5									2								1		1	1						

188c. Automobile accidents	M	318	1	....	4	10	3	31	16	21	28	25	11	16	23	21	17	14	19	17	17	13	6	3	1	....	....	1	188c
	F	119	1	1	....	6	4	17	2	6	5	8	3	3	7	6	6	10	5	8	12	5	2	2	....	....	....	....	
188d. Aeroplane and balloon accidents	M	6	....	....	....	....	....	....	....	1	1	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	188d
188e. Injuries by other vehicles	M	50	1	1	1	2	1	1	2	1	2	1	....	....	2	5	4	4	8	6	5	1	2	....	....	....	....	....	188e
	F	4	....	....	....	....	....	....	1	....	1	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	
188f. Other crushing	M	90	....	....	1	1	1	....	....	10	5	12	15	9	4	9	7	7	5	2	....	....	....	....	....	....	....	2	188f
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	
189. Injuries by animals (poisoning excepted)	M	15	....	....	....	....	....	1	....	1	....	2	....	....	1	2	....	2	1	2	1	1	1	....	....	....	....	....	189
192. Starvation (deprivation of food or water)	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	192
193. Excessive cold	M	10	....	....	....	....	....	....	....	1	1	1	....	....	....	2	1	....	....	....	....	2	1	....	....	....	....	1	193
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	1	....	....	....	....	....	
194. Excessive heat	M	7	1	....	....	....	....	....	....	....	....	1	1	....	....	....	....	1	1	....	....	1	....	1	....	....	....	....	194
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	
195. Lightning	M	14	....	....	....	....	....	....	1	3	1	1	....	1	1	....	1	1	1	1	....	....	....	....	....	1	....	1	195
	F	2	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
196. Other accidental electric shocks	M	26	....	....	....	....	....	....	2	1	4	5	2	3	3	3	1	1	1	....	....	....	....	....	....	....	....	....	196
	F	2	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
197-199. Homicides	M	40	15	1	....	....	2	....	....	1	....	3	5	2	2	2	1	1	1	....	1	....	....	....	1	....	....	2	197–199
	F	21	8	....	....	....	....	1	1	2	2	2	2	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
197. Homicide by firearms	M	8	....	....	....	....	....	....	....	1	....	....	2	2	....	....	....	1	1	....	1	....	....	....	....	....	....	....	197
	F	3	....	....	....	....	....	....	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
198. Homicide by cutting or piercing instruments	M	3	....	....	....	....	1	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	198
	F	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
199. Homicide by other means	M	29	15	1	....	....	1	....	....	....	....	3	2	....	2	1	1	....	....	....	....	....	....	....	1	....	....	2	199
	F	17	8	....	....	....	....	1	1	2	2	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
201. Fracture (cause not specified)	M	60	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	2	1	8	11	15	13	6	1	1	....	201
	F	131	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	2	19	25	44	18	20	1	....	....	
202. Other external violence (cause specified)	M	70	5	2	3	....	....	2	2	3	5	3	7	4	2	7	2	6	6	3	2	5	....	....	....	....	....	1	202
	F	10	....	2	1	....	....	....	1	....	....	....	....	1	....	1	....	....	....	1	1	....	1	1	....	....	....	....	
203. External violence (cause not specified)	M	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	203
CLASS XV.—ILL-DEFINED DISEASES.																													
Total		181	14	2	1	....	1	1	2	2	4	1	1	3	3	5	6	6	17	23	19	21	20	16	6	2	1	4	
	M	106	9	....	1	....	....	....	1	....	1	1	1	1	2	4	4	4	13	20	12	9	10	7	2	1	....	3	
	F	75	5	2	....	....	1	1	1	2	3	....	....	2	1	1	2	2	4	3	7	12	10	9	4	1	1	1	
204. Sudden death	M	5	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	204
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	
205. Cause of death not specified or ill-defined	M	101	6	....	1	....	....	....	1	....	1	1	1	1	2	4	4	4	12	19	12	9	10	7	2	1	....	3	205
	F	74	5	2	....	....	1	1	1	2	3	....	....	2	1	1	2	2	4	3	7	11	10	9	4	1	1	1	
205a. Ill-defined	M	3	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	205a
	F	4	....	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	
205b. Not specified or unknown	M	24	6	....	....	....	....	....	1	....	1	1	....	1	....	2	....	1	4	3	....	....	....	1	....	....	....	....	3	205b
	F	14	5	....	....	....	....	1	1	2	1	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	....	....	1	
205c. Heart failure	M	74	....	....	....	....	....	....	....	....	....	....	1	....	2	1	4	3	8	15	12	9	10	6	2	1	....	....	205c
	F	55	....	....	....	....	....	....	....	....	1	....	....	1	1	1	2	2	3	2	7	11	9	9	4	1	1	....	
205d. Syncope	F	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	205d

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
Deaths—All Causes. Total		**6962**	**895**	**125**	**55**	**50**	**34**	**119**	**83**	**105**	**160**	**196**	**210**	**272**	**333**	**372**	**433**	**439**	**547**	**630**	**630**	**534**	**389**	**233**	**96**	**15**	**4**	**3**	
	M	3497	498	74	25	28	21	64	42	60	74	87	87	125	191	172	244	232	284	315	317	236	176	103	33	6	1	2	
	F	3465	397	51	30	22	13	55	41	45	86	109	123	147	142	200	189	207	263	315	313	298	213	130	63	9	3	1	
Class I.—Epidemic, Endemic and Infectious Diseases.																													
Total		765	66	38	14	18	14	44	23	30	39	47	40	43	41	41	46	36	34	39	38	38	23	9	3	....	....	1	
	M	388	37	25	7	8	9	24	13	18	18	25	12	20	21	22	26	21	17	13	13	14	14	6	....	....	....	1	
	F	377	29	13	7	10	5	20	10	12	21	22	28	23	20	19	20	15	17	22	25	24	9	3	3	....	....	....	
1. Typhoid and paratyphoid fever	M	4	....	....	....	....	....	....	....	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
	F	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
1A. Typhoid fever	M	4	....	....	....	....	....	....	....	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1A
	F	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
5. Malaria	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	5
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
7. Measles	M	14	2	6	2	....	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
	F	3	1	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
8. Scarlet fever	M	3	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8
	F	3	....	....	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
9. Whooping-cough	M	10	5	2	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
	F	19	12	4	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
10. Diphtheria	M	23	....	3	1	2	2	13	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
	F	27	....	4	1	4	1	11	4	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	
11. Influenza	M	122	11	6	2	2	1	2	2	4	1	4	3	3	6	8	11	9	8	7	7	7	12	6	....	....	....	....	11
	F	159	4	1	4	1	....	3	1	3	6	9	9	6	7	6	7	10	12	16	21	20	7	3	3	....	....	....	
11A. Influenza, sole cause	M	8	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1	....	1	....	....	....	2	2	....	....	....	....	11A
	F	14	3	....	2	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	6	....	1	....	....	....	....	
11B. Influenza, with phthisis	M	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	11B
	F	2	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11C. Influenza, with bronchitis	M	6	1	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	1	1	....	....	....	....	....	....	11C
	F	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	2	....	1	....	....	....	....	
11D. Influenza, with pneumonia	M	70	10	3	2	1	1	1	1	3	....	4	3	2	1	6	7	4	3	3	1	4	7	3	....	....	....	....	11D
	F	97	1	....	2	1	....	1	1	2	5	4	6	4	5	4	6	6	8	11	15	8	5	....	2	....	....	....	
11F. Influenza, with diseases and accidents of pregnancy and parturition	F	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11F
11G. Influenza, with other causes	M	36	....	2	....	1	....	1	1	1	1	....	....	....	2	2	2	5	4	3	5	2	3	1	....	....	....	....	11G
	F	39	....	1	....	....	....	2	....	....	1	3	2	1	2	2	1	2	4	5	5	4	2	1	1	....	....	....	
13. Mumps	F	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	13

16. Dysentery	M	4			1					1														1	1						16
	F	1																						1							
21. Erysipelas	M	20	7												1		1	1	3		1	2	3	1							21
	F	12	3		1										1		1	1			2	1	1	1							
22. Acute anterior poliomyelitis	M	6					2	1	2	1																					22
23. Lethargic encephalitis	M	7						1	1		1			1			1			1	1										23
	F	3												1	1		1														
24. Meningococcus meningitis	M	5	1			1		1					1				1														24
	F	3				1					1							1													
25. Other epidemic and endemic diseases	M	2		2																											25
	F	2		2																											
25A. Chicken-pox	F	1		1																											25A
25C. Others under this title	M	2		2																											25C
	F	1		1																											
29. Tetanus	M	1					1																								29
	F	3							2									1													
31-37. Tuberculosis. Total	M	125	2	2		2		3	4	9	14	17	8	15	12	9	10	4	5	3	3	2						1	31–37		
	F	106	4	1		3	2	4	3	7	11	12	13	11	10	6	7	5	4	1	1	1									
31. Tuberculosis of the respiratory system	M	102				1			1	6	11	15	6	14	12	9	10	4	4	3	3	2						1	31		
	F	80	2					1	2	5	10	12	10	11	9	3	5	4	3	1	1	1									
32. Tuberculosis of the meninges and central nervous system	M	8	1	2				1	1	1	2																		32		
	F	10	1			3	2	2					1				1														
33. Tuberculosis of the intestines and peritoneum	M	1										1																	33		
	F	6		1							1		1			1	1	1													
34. Tuberculosis of the vertebral column	M	5						1	1	1			1						1										34		
35. Tuberculosis of the joints	M	2								1			1																35		
	F	2							1										1												
36. Tuberculosis of other organs	M	3							1			1		1															36		
	F	1											1																		
36C. Tuberculosis of the lymphatic system (mesenteric, and retroperitoneal glands excepted)	M	1							1																				36C		
	F	1											1																		
36D. Tuberculosis of the genito-urinary system	M	2										1		1															36D		
37. Disseminated tuberculosis	M	4	1			1		1			1																		37		
	F	7	1					1		2					1	2															
37A. Disseminated tuberculosis, acute	M	2	1			1																							37A		
	F	4						1		1					1	1															
37B. Disseminated tuberculosis, chronic or unstated	M	2						1			1																		37B		
	F	3	1							1						1															
38. Syphilis	M	26	5	1					1	1				1	2	1	3	4	3	4									38		
	F	18	3						1				4	1	2	2	2			2			1								
40. Gonococcus infection	F	2												2															40		
41. Purulent infection, septicaemia	M	15	4	1					1	1	1	1			1	1	1	1		1	1								41		
	F	12	2							1	2		1		1	1			1	1	1			1							

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.																												
Total		1092	28	2	2	2	1	14	8	9	12	21	19	42	63	99	114	121	146	144	113	68	41	16	6	1	....	....	
	M	464	18	1	....	....	1	6	4	4	6	7	7	17	32	27	44	49	78	62	51	30	11	7	2	....	....	....	
	F	628	10	1	2	2	....	8	4	5	6	14	12	25	31	72	70	72	68	82	62	38	30	9	4	1	....	....	
43-49. Cancer. Total	M	329	....	....	....	....	....	....	1	....	4	3	4	11	17	21	31	36	62	51	44	26	10	6	2	....	....	....	43-49
	F	432	....	....	1	....	....	3	2	....	2	4	5	13	22	50	50	51	53	57	48	33	27	7	3	1	....	....	
43. Cancer of the buccal cavity	M	29	....	....	....	....	....	....	1	....	....	....	....	....	....	4	1	3	8	6	4	1	....	....	1	....	....	....	43
	F	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	1	....	1	....	....	....	....	....	
44. Cancer of the stomach and liver	M	100	....	....	....	....	....	....	....	....	....	1	....	3	6	6	10	10	22	17	11	9	4	1	....	....	....	....	44
	F	108	....	....	....	....	....	....	....	....	....	1	....	3	1	9	9	14	11	20	17	12	9	1	....	1	....	....	
45. Cancer of the peritoneum, intestines and rectum	M	71	....	....	....	....	....	....	....	....	1	1	1	2	5	2	6	12	14	8	9	7	1	1	1	....	....	....	45
	F	87	....	....	....	....	....	....	....	....	....	....	1	....	2	12	10	7	11	16	11	7	7	3	....	....	....	....	
46. Cancer of the female genital organs	F	84	....	....	....	....	....	....	....	....	....	2	3	7	7	11	9	15	11	8	3	5	2	....	1	....	....	....	46
47. Cancer of the breast	F	85	....	....	....	....	....	....	....	....	....	....	....	2	6	15	12	11	11	8	7	6	5	1	1	....	....	....	47
48. Cancer of the skin	M	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	3	....	....	1	....	....	....	....	48
	F	5	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	1	....	1	1	....	....	....	
49. Cancer of other or unspecified organs	M	123	....	....	....	....	....	....	....	....	3	1	3	6	6	9	13	11	17	20	17	9	5	3	....	....	....	....	49
	F	59	....	....	1	....	....	3	1	....	2	1	1	1	5	3	10	4	9	3	9	2	3	1	....	....	....	....	
49A. Cancer of the eye and ear	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	49A
49B. Cancer of the circulatory system	M	10	....	....	....	....	....	....	....	....	1	1	1	1	....	....	....	2	1	*1	1	....	1	....	....	....	....	....	48B
	F	4	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	....	
49C. Cancer of the respiratory system	M	23	....	....	....	....	....	....	....	....	....	....	....	3	1	5	2	1	4	2	4	....	1	....	....	....	....	....	49C
	F	18	....	....	....	....	....	1	....	....	....	1	1	1	2	2	4	....	3	....	2	1	....	....	....	....	....	....	
49D. Cancer of the digestive system	M	13	....	....	....	....	....	....	....	....	....	....	1	....	1	1	3	1	2	3	1	....	....	....	....	....	....	....	49D
	F	10	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	2	2	....	1	....	2	....	....	....	....	....	
49. Cancer of the genito-urinary organs	M	53	....	....	....	....	....	....	....	....	....	....	....	1	3	2	1	6	8	11	9	8	3	1	....	....	....	....	49E
	F	7	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	3	3	....	....	....	....	....	....	....	
49F. Cancer of the bones and joints	M	8	....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	....	....	1	2	1	....	1	....	....	....	....	49F
	F	6	....	....	....	....	....	....	1	....	1	....	....	....	....	....	1	....	....	....	....	....	1	1	....	....	....	....	
49G. Cancer of other specified organs	M	14	....	....	....	....	....	....	....	....	1	....	1	1	....	1	5	....	2	2	....	....	....	1	....	....	....	....	49G
	F	10	....	....	....	....	....	1	....	....	1	....	....	....	1	....	2	2	1	....	1	1	....	....	....	....	....	....	

49H. Generalized cancer	M	1															1												49H
	F	3														1				1		1							
49I. Cancer, unspecified	M	1																	1										49I
50. Benign tumours and tumours not returned as malignant (tumours of the female genital organs excepted)	M	4														1	1	2											50
	F	7															3	2				2							
51. Acute rheumatic fever	M	10					1	4	1	1	1	1				1													51
	F	17						1	2	1	3	4		1	2	1					2								
53. Scurvy	M	1	1																										53
54. Pellagra	F	1												1															54
56. Rickets	M	5	5																										56
	F	2	2																										
57. Diabetes mellitus	M	30						1	2			2			1	1		4	7	3	5	3		1					57
	F	53		1				1				3			1	3	7	7	7	11	7		3	1	1				
58. Anaemia, chlorosis	M	19								1		1			1		3	4	2	3	2	1	1						58
	F	29								2				2	1	2	2	3	4	6	4	3							
58A. Anaemia, pernicious	M	16													1		3	4	2	3	2		1						58A
	F	28								1				2	1	2	2	3	4	6	4	3							
58B. Other anaemias and chlorosis	M	3								1		1										1							58B
	F	1								1																			
59. Diseases of the pituitary gland	M	2									1			1															59
60. Diseases of the thyroid gland	M	6												1			2	3											60
	F	60								1	1	2	5	8	4	8	9	9	3	6	1	2		1					
60A. Exophthalmic goiter	M	2															1	1											60A
	F	33									1	1	1	3	1	6	6	7	1	4	1	1							
60B. Other diseases of the thyroid gland	M	4												1			1	2											60B
	F	27								1		1	4	5	3	2	3	2	2	2		1		1					
61. Diseases of the parathyroid glands	M	2	2																										61
62. Diseases of the thymus	M	8	8																										62
	F	7	6		1																								
63. Diseases of the adrenals (Addison's disease)	M	2															1			1									63
	F	1														1													
64. Diseases of the spleen	M	3								1				1		1													64
	F	3						1						1		1													
65. Leukaemia, lymphadenoma	M	18						1		1				2		5	1	2	1	3	2								65
	F	7	1					1		1		1				1	1		1										
65A. Leukaemia	M	8						1		1						3		1	1		1								65A
	F	5	1					1		1							1		1										
65B. Lymphadenoma (Hodgkin's disease)	M	10												2		2	1	1		3	1								65B
	F	2										1				1													
66. Alcoholism	M	18												3	5	2	3		3	2									66
	F	3														2			1										
66A. Delirium tremens	M	2														2													66A
66B. Acute alcoholism	M	13												2	5		2		2	2									66B
	F	3														2			1										
66C. Chronic alcoholism	M	3												1			1		1										66C
67. Chronic poisoning by mineral substances	M	1														1													67
67B. Others under this title	M	1														1													67B
68. Chronic organic poisoning	F	2												1				1											68
68A. Chronic morphinism	F	1																1											68A
68C. Chronic organic poisoning	F	1												1															68C
69. Other general diseases	M	6	2	1										1				1	1										69
	F	4	1			2		1																					

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																											
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
69B. Haemophilia	M	2	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	69B
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
69C. Purpura haemorrhagica	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	69C
	F	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
69D. Others under this title	M	3	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	69D
	F	2	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																													
Total		539	36	10	7	1	3	7	11	7	9	11	11	19	29	20	48	40	42	65	54	50	33	20	4	2	....	....	
	M	268	27	6	4	1	1	2	1	3	5	7	7	12	19	8	21	29	22	27	16	24	15	10	1	....	....	....	
	F	271	9	4	3	....	2	5	10	4	4	4	4	7	10	12	27	11	20	38	38	26	18	10	3	2	....	....	
70. Encephalitis	M	9	....	....	....	....	1	1	1	....	1	1	1	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	70
	F	8	....	....	1	....	....	1	2	....	....	....	1	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
70A. Abscess of brain	M	3	....	....	....	....	....	1	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	70A
	F	3	....	....	1	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
70B. Encephalitis	M	6	....	....	....	....	1	....	1	....	....	1	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	70B
	F	5	....	....	....	....	....	1	1	....	....	....	....	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
71. Meningitis	M	13	6	2	1	....	....	....	....	....	....	....	....	2	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	71
	F	4	....	....	1	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
71A. Simple meningitis	M	13	6	2	1	....	....	....	....	....	....	....	....	2	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	71A
	F	4	....	....	1	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
72. Tabes dorsalis (locomotor ataxia)	M	16	....	....	....	....	....	....	....	....	....	....	....	1	1	2	4	3	....	2	2	....	1	....	....	....	....	....	....	72
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	1	....	....	....	....	....	....	....	....	....	
73. Other diseases of the spinal cord	M	35	....	....	....	....	....	....	....	2	1	1	1	....	6	2	1	5	2	6	2	5	1	....	....	....	....	....	....	73
	F	19	....	....	1	....	....	....	1	....	....	....	....	....	1	1	3	....	2	5	4	....	1	....	....	....	....	....	....	
74. Cerebral haemorrhage, apoplexy	M	89	....	....	....	....	....	....	....	....	1	....	....	1	6	....	5	13	12	11	9	10	11	9	1	....	....	....	....	74
	F	135	....	....	....	....	....	....	....	....	....	....	....	2	5	5	13	8	12	26	22	20	14	16	1	1	....	....	
74A. Apoplexy	M	27	....	....	....	....	....	....	....	....	....	....	....	....	4	....	1	5	1	3	2	3	4	3	1	....	....	....	....	74A
	F	33	....	....	....	....	....	....	....	....	....	....	....	....	....	1	4	2	3	4	7	7	4	1	....	....	....	....	....	
74B. Cerebfal haemorrhage	M	54	....	....	....	....	....	....	....	....	1	....	....	1	2	....	4	7	8	7	6	6	7	5	....	....	....	....	....	74B
	F	82	....	....	....	....	....	....	....	....	....	....	....	2	3	2	7	6	7	18	13	12	8	3	1	....	....	....	....	
74C. Cerebral thrombosis and embolism	M	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	1	1	1	....	1	....	....	....	....	....	74C
	F	20	....	....	....	....	....	....	....	....	....	....	....	....	2	2	2	....	2	4	2	1	2	2	....	1	....	....	....	
75. Paralysis without specified cause	M	14	....	....	....	....	....	....	....	....	....	....	1	1	1	....	....	2	....	3	1	3	2	....	....	....	....	....	....	75
	F	23	....	....	....	....	....	....	....	....	....	....	....	1	....	....	4	1	2	1	5	2	2	3	1	1	....	....	....	

75A. Hemiplegia	M	9																2		3	1	2	1					75A
	F	18												1			1	1	2	1	5	1	2	3	1				75B
75B. Others under this title	M	5										1	1	1								1						
	F	5															3					1				1		
76. General paralysis of the insane	M	10										2		1		2	3		1	1								76
	F	2																	1				1					
77. Other forms of mental alienation	M	6									1		1					1			3							77
	F	11								1		1	1		2	1	1	4										
78. Epilepsy	M	9				1					2	2		2	1		1											78
	F	10								1	2	1			2	3				1								
80. Infantile convulsions (under 5 years of age)	M	7	6	1																								80
	F	1	1																									81
81. Chorea	F	1								1														1				82
82. Neuralgia and neuritis	M	1																										
	F	1						1													1	1			1			83
83. Softening of the brain	F	3																										
84. Other diseases of the nervous system	M	29			1			1				2		3	2	2	6	1	6	3	1	1						84
	F	27		2			1	1	2	2		1	2	1		3	2	1	1		5	3						
85. Diseases of the eye and annexa	M	2																				2						85
86. Diseases of the ear and of the mastoid process	M	28	15	3	2					1	2			2			1	1	1									86
	F	23	8	2				3	3	1	1	1			2					1				1				
86A. Diseases of the ear	M	18	9	3	2					1				1				1	1									86A
	F	12	4	1				2	2		1									1				1				
86B. Diseases of the mastoid process	M	10	6								2			1			1											86B
	F	11	4	1				1	1	1		1			2													
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.																												
Total		1617				1		6	7	9	21	21	27	29	55	69	86	102	172	209	239	246	173	86	52	6	1		
	M	808				1		3	3	5	9	12	13	17	31	35	59	55	80	114	125	106	84	35	18	3		
	F	809						3	4	4	12	9	14	12	24	34	27	47	92	95	114	140	89	51	34	3	1	
87-90. Diseases of the heart	M	483				1		3	3	5	8	12	12	14	27	25	39	30	44	71	65	41	51	17	12	3		87–90
	F	475						3	4	4	12	9	14	10	19	21	14	24	57	50	56	83	54	23	16	2		
87. Pericarditis	M	1									1																	87
	F	2																	1			1						
88. Endocarditis and myocarditis (acute)	M	20							1	1	1	7	2	2	4	1			1									88
	F	23						1	1	1	4	4	2	1	2	1				1	1	3	1					
88A. Acute endocarditis	M	13								1	1	6	1	2	2													88A
	F	15						1	1	1	3	3	1	1	1	1						2						
88B. Acute myocarditis	M	7							1			1	1		2	1			1									88B
	F	8									1	1	1		1					1	1	1	1					
89. Angina pectoris	M	84												3	3	3	6	11	11	19	14	5	6	1	2			89
	F	46													3		2	2	7	10	8	7	7					
90. Other diseases of the heart	M	378				1		3	2	4	6	5	10	9	20	21	33	19	32	52	51	36	45	16	10	3		90
	F	404						2	3	3	8	5	12	9	14	20	12	22	49	39	47	72	46	23	16	2		
90A. Valvular disease	M	68						1	1	2	3	2	4	3	7	7	6	3	2	9	5	6	4	2	1			90A
	F	78								1	2	1	6	2	4	5	4	3	8	6	7	15	5	3	5	1		

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
90B. Fatty degeneration of the heart	F	3													1	1								1				90B
90D. Chronic endocarditis	M	45								2	1	1	2	1	6	1	7	3	5	5	5	3	2		1			90D
	F	78						1	1	2	3	3	3	2	3	8	2	6	10	6	6	8	11	2		1		
90E. Chronic myocarditis	M	231				1		2	1		2	1	4	5	6	11	16	13	21	30	33	25	36	13	8	3		90E
	F	204						1	2		2	1	3	5	6	5	5	11	26	23	27	39	27	12	9			
90F. Others under this title	M	34										1			1	2	4		4	8	8	2	3	1				90F
	F	41									1					1	1	2	5	4	7	10	3	6	1			
91. Diseases of the arteries	M	312									1		1	1	4	9	18	23	35	42	58	63	33	18	6			91
	F	321												1	5	12	12	20	34	44	55	55	35	28	18	1	1	
91A. Aneurysm	M	7									1					2	2		1	1								91A
	F	5														1	2	1			1							
91B. Arteriosclerosis	M	301											1	1	3	6	16	23	34	41	57	63	33	17	6			91B
	F	314												1	5	11	10	19	33	44	54	55	35	28	17	1	1	
91C. Other diseases of the arteries	M	4													1	1					1			1				91C
	F	2																	1						1			
92. Embolism and thrombosis (not cerebral)	M	9												1		1	1		1	1	2	2						92
	F	7												1			1	1			2	2						
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	M	3												1				2										93
	F	5														1		1	1	1	1							
94. Diseases of the lymphatic system (lymphangitis, etc.)	M	1															1											94
	F	1																1										
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.																												
Total		768	111	38	17	6	3	7	6	11	17	13	20	44	46	42	40	45	49	63	53	48	47	30	10	2		
	M	405	58	25	7	4	3	1	2	8	8	9	11	22	35	22	24	25	31	29	31	16	17	11	4	2		
	F	363	53	13	10	2		6	4	3	9	4	9	22	11	20	16	20	18	34	22	32	30	19	6			
97. Diseases of the nasal fossae and their annexa	M	2								1										1								97
	F	4		1							1			1		1												
98. Diseases of the larynx	M	4			1		1			1						1												98
	F	4	1		1			1												1								
98A. Laryngismus stridulus	F	1	1																									98A
98B. Laryngitis	M	4			1		1			1						1												99B
	F	3			1			1												1								
99. Bronchitis	M	6	1	1	1										1						1		1					99
	F	12	1	2	1	1											1			1		1	3		1			
99A. Bronchitis, acute	M	4	1	1	1										1													99A
	F	8	1	2	1	1											1						1		1			

99B. Bronchitis, chronic	M	2																			1			1					99B
	F	1																					1						
99D. Bronchitis, not otherwise defined, 5 years or over	F	3																	1		1	1							99D
100. Broncho-pneumonia (including capillary bronchitis)	M	150	45	17	5	1				1	2	1	2	6	7	3	6	5	4	8	13	8	6	7	1	2			100
	F	143	40	6	1	1		2	1	1	2	1	2	11	5	5	5	1	8	12	5	12	10	11	1				
100A. Broncho-pneumonia	M	150	45	17	5	1				1	2	1	2	6	7	3	6	5	4	8	13	8	6	7	1	2			100A
	F	142	40	6	1	1		2	1	1	2	1	2	11	5	5	5	1	8	11	5	12	10	11	1				
100B. Capillary bronchitis	F	1																		1									100B
101. Pneumonia	M	196	12	3		2			1	4	4	7	7	14	17	17	16	16	23	18	13	6	10	3	3				101
	F	174	11	4	6			3	3	2	5	3	7	8	6	11	7	16	10	17	12	18	15	6	4				
101A. Pneumonia, lobar	M	141	5	1		2			1	4	3	7	6	12	13	13	9	10	19	11	10	4	8	2	1				101A
	F	100	4	1	5			2	1	1	4	3	5	6	3	8	5	9	7	11	7	11	4	1	2				
101B. Pneumonia, not otherwise defined	M	55	7	2							1		1	2	4	4	7	6	4	7	3	2	2	1	2				101B
	F	74	7	3	1			1	2	1	1		2	2	3	3	2	7	3	6	5	7	11	5	2				
102. Pleurisy	M	19		2		1	1		1	1	1	1		1	5	1		2			1	1							102
	F	10			1									2		1	1	1		2	1			1					
103. Congestion and haemorrhagic infarct of the lung	M	1																			1								103
	F	8															1				3	1	2	1					
104. Gangrene of the lung	M	1												1															104
	F	1														1													
105. Asthma	M	10								1		1		1		1	1	2		2		1							105
	F	4													1	1	1		1										
106. Pulmonary emphysema	M	2												1					1										106
107. Other diseases of the respiratory system (tuberculosis excepted)	M	14		2			1	1				1		3		1	1	2	1		1								107
	F	3								1								1		1									
107A. Chronic interstitial pneumonia, including occupational diseases of the lungs	M	2																1				1							107A
107C. Others under this title	M	12		2			1	1				1		3		1			2	1									107C
	F	3								1								1			1								
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.																													
Total		566	135	22	5	6	5	16	10	7	14	20	20	23	40	28	41	40	31	41	23	17	11	7	4				
	M	300	71	10	1	3	3	11	6	3	10	9	10	12	25	14	29	19	16	24	11	5	5	2	1				
	F	266	64	12	4	3	2	5	4	4	4	11	10	11	15	14	12	21	15	17	12	12	6	5	3				
108. Diseases of the mouth and annexa	M	1										1																	108
	F	5	1				1							1			1						1						
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	19	10	2		1	1	2	1						1							1							109
	F	20	6	5	1	1		3	1			2	1																
109B. Pharynx and tonsils	M	19	10	2		1	1	2	1						1							1							109B
	F	20	6	5	1	1		3	1			2	1																
111. Ulcer of the stomach and duodenum	M	53									2	2	1	4	9	6	11	9	3	4	2								111
	F	8											1			3		1	1			2							
111A. Ulcer of the stomach	M	26									1			2	6		4	6	3	3	1								111A
	F	4														3			1										

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
111B. Ulcer of the duodenum	M	27									1	2	1	2	3	6	7	3		1	1							111B
	F	4											1					1				2						
112. Other diseases of the stomach (cancer excepted)	M	8	2										1		1			1	2	1								112
	F	8	1										1		1			1			1	1	1	1				
113. Diarrhoea and enteritis (under 2 years of age)	M	61	55	6																								113
	F	59	54	5																								
114. Diarrhoea and enteritis (2 years or over)	M	9				1			1				1	1	2			1		1			1					114
	F	16			3	1		1	1					2	2			1	1		1	2	1					
117. Appendicitis and typhlitis	M	64		1	1			8	4	2	6	6	3	2	8	1	6	5	1	7	2		1					117
	F	45				1		1	1	3	4	3	4	4	3	4	2	7	2	5	1							
118. Hernia, instestinal obstruction	M	27	4					1			1		1	2	1	1	3	1	3	4	2		1	1	1			118
	F	41	1				1		1	1		2	2	1	4		5	3	3	5	4	4		2	2			
118A. Hernia	M	10	1											2			2	1	1	1			1		1			118E
	F	13										1			2		1	1	1	2	2	2			1			
118B. Intestinal obstruction	M	17	3					1			1		1		1	1	1		2	3	2		1					118B
	F	28	1				1		1	1		1	2	1	2		4	2	2	3	2	2		2	1			
119. Other diseases of the intestines	M	9				1								1			2		1		1	1	2					119
	F	11	1									1		1	1	2		2	1				1		1			
120. Acute yellow atrophy of the liver	M	1															1											120
	F	1											1															
122. Cirrhosis of the liver	M	18											2		1	2	3	1	2	5		2						122
	F	7													1	2		1	3									
122A. Cirrhosis of the liver, specified as alcoholic	M	2											1			1												122A
	F	1													1													
122B. Cirrhosis of the liver, not specified as alcoholic	M	16											1		1	1	3	1	2	5		2						122B
	F	6														2		1	3									
123. Bilary calculi	M	4														1			1		1	1						123
	F	5												1			1	1			2							
124. Other diseases of the liver	M	15											1	2		2	2		3	1	3		1					124
	F	34		1								2		1	2	3	3	3	3	6	3	3	2	2				
125. Diseases of the pancreas	M	3													1			1		1								125
	F	5										1			1			1	1	1								
126. Peritonitis without specified cause	M	8		1			2			1	1				1	1	1											126
	F	1		1																								

CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																												
Total		461	6	1	1	2	1	2	3	5	5	10	15	22	30	41	38	38	47	42	70	36	23	16	5	2	....	....	
	M	262	2	....	1	1	1	1	2	3	3	3	6	5	13	20	22	23	27	26	46	30	16	9	2	....	....	....	
	F	199	4	1	....	1	....	1	1	2	2	7	9	17	17	21	16	15	20	16	24	6	7	7	3	2	....	....	
128. Acute nephritis (including unspecified, under 10 years of age)	M	14	2	....	1	1	....	1	....	3	....	....	2	1	1	....	....	....	....	....	1	1	....	....	....	....	....	....	128
	F	10	1	....	....	....	....	....	....	....	....	....	1	1	1	....	2	....	....	1	3	....	....	....	....	....	....	....	
129. Chronic nephritis (Bright's Disease)	M	151	....	....	....	....	....	....	1	....	2	2	4	4	11	14	16	18	21	19	18	8	7	6	....	....	....	....	129
	F	127	....	....	....	....	....	1	....	2	1	2	4	10	5	11	11	13	14	14	16	5	7	7	3	1	....	....	
131. Other diseases of the kidneys and annexa	M	16	....	....	....	....	....	....	1	....	1	....	....	....	....	2	3	1	2	1	4	1	....	....	....	....	....	....	131
	F	22	3	1	....	1	....	....	1	....	1	1	1	1	3	4	....	1	2	1	1	....	....	....	....	....	....	....	
132. Calculi of the urinary passages	M	5	....	....	....	....	1	....	....	....	....	....	....	....	1	1	....	1	....	....	....	....	....	1	....	....	....	....	132
	F	4	....	....	....	....	....	....	....	....	....	....	....	2	1	....	....	....	....	....	1	....	....	....	....	....	....	....	
133. Diseases of the bladder	M	9	....	....	....	....	....	....	....	....	....	1	....	....	....	1	1	....	....	1	1	1	3	....	....	....	....	....	133
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	
134. Diseases of the urethra, urinary abscess, etc	M	5	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	2	....	....	....	1	....	....	....	....	....	....	134
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
134A. Stricture of the urethra	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	....	....	....	....	134A
134B. Other diseases of the urethra	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	134B
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
135. Diseases of the prostate	M	62	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	4	5	22	18	6	2	2	....	....	....	135
137. Cysts and other benign tumours of the ovary	F	5	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	2	....	1	....	....	....	....	....	....	....	137
138. Salpingitis and pelvic abscess	F	4	....	....	....	....	....	....	....	....	....	1	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	138
139. Benign tumours of the uterus	F	10	....	....	....	....	....	....	....	....	....	2	1	1	3	1	1	....	....	....	1	....	....	....	....	....	....	....	139
140. Non-puerperal uterine haemorrhage	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	140
141. Other diseases of the female genital organs	F	12	....	....	....	....	....	....	....	....	....	1	....	2	3	2	2	....	2	....	....	....	....	....	....	....	....	....	141
CLASS VIII.—THE PUERPERAL STATE.																												
Total		111	....	....	....	....	....	....	....	5	23	27	28	15	10	3	....	....	....	....	....	....	....	....	....	....	....	....	
143. Accidents of pregnancy	F	11	....	....	....	....	....	....	....	....	3	2	3	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	143
143A. Abortion	F	3	....	....	....	....	....	....	....	....	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	143A
143B. Ectopic gestation	F	5	....	....	....	....	....	....	....	....	1	1	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143B
143C. Others under this title	F	2	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	143C
143D. Abortion, self-induced	F	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143D
144. Purpura haemorrhage	F	13	....	....	....	....	....	....	....	1	....	4	3	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	144
145. Other accidents of labour	F	17	....	....	....	....	....	....	....	1	2	6	3	2	3	....	....	....	....	....	....	....	....	....	....	....	....	....	145
145A. Caesarean section	F	6	....	....	....	....	....	....	....	....	....	1	2	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	145A
145B. Difficult labour	F	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	145B
145C. Other surgical operations and instrumental delivery	F	3	....	....	....	....	....	....	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	145C
145D. Uncontrollable vomiting	F	7	....	....	....	....	....	....	....	1	1	4	1	....	....	....	....	....	....	....	....	....	....	....	....	..	....	....	145D
146. Puerperal septicaemia	F	44	....	....	....	....	....	....	....	2	12	8	10	8	3	1	....	....	....	....	....	....	....	....	....	....	....	....	146

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in perperium	F	6	....	....	....	....	....	....	....	....	1	2	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	147
148. Puerperal albuminuria and convulsions	F	19	....	....	....	....	....	....	....	1	5	5	5	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	148
149. Fllowing childbirth (not otherwise defined)	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	149
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																												
Total	...	33	6	....	....	....	....	1	....	1	1	....	2	2	1	3	....	1	2	2	3	3	4	1	....	....	....	....	
	M	17	2	....	....	....	....	1	....	1	1	....	1	....	....	3	....	....	....	2	3	1	2	....	....	....	....	....	
	F	16	4	....	....	....	....	....	....	....	....	....	1	2	1	....	....	1	2	....	....	2	2	1	....	....	....	....	
151. Gangrene	M	4	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....	....	151
	F	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	2	1	....	....	....	....	
152. Furuncle	M	5	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	1	1	1	....	....	....	....	....	....	152
	F	3	1	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
153. Acute abscess	M	7	1	....	....	....	....	1	....	1	....	....	1	....	....	1	....	....	....	....	2	....	....	....	....	....	....	....	153
	F	4	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
154. Other diseases of the skin and and annexa	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	154
	F	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	1	....	....	....	....	....	....	
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																												
Total	...	24	4	....	1	1	....	3	1	4	1	1	....	2	1	....	1	....	1	1	....	1	1	....	....	....	....	....	
	M	15	2	....	....	....	....	2	1	3	1	....	....	1	....	....	1	....	1	.. 1	....	1	1	....	....	....	....	....	
	F	9	2	....	1	1	....	1	....	1	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	10	2	....	....	....	....	2	1	1	....	....	....	....	....	....	....	....	1	1	....	1	1	....	....	....	....	....	155
	F	6	....	....	1	1	....	1	....	1	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
156. Diseases of the joints (tuberculosis and rheumatism excepted)	M	4	....	....	....	....	....	....	....	2	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	156
	F	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	

158. Other diseases of the organs of locomotion	M	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	158
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
CLASS XI.—MALFORMATIONS.																															
Total		93	75	5	3	1	....	1	3	2	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	
	M	47	40	1	2	1	....	....	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	F	46	35	4	1	....	....	1	2	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	
159. Congenital malformations (still-births not included)	M	47	40	1	2	1	....	....	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159
	F	46	35	4	1	....	....	1	2	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	
159A. Congenital hydrocephalus	M	3	....	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159A
	F	5	2	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159B. Congenital malformations of the heart	M	20	18	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159B
	F	18	17	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	
159C. Others under this title	M	24	22	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159C
	F	23	16	3	1	....	....	....	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
CLASS XII.—DISEASES OF EARLY INFANCY.																															
Total		410	410	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	M	229	229	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	F	181	181	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
160. Congenital debility, icterus and sclerema	M	28	28	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	160
	F	14	14	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161. Premature birth, injury at birth	M	181	181	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161
	F	145	145	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161A. Premature birth	M	152	152	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161A
	F	127	127	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
161B. Injury at birth	M	29	29	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	161B
	F	18	18	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
162. Other diseases peculiar to early infancy	M	20	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	162
	F	22	22	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
162A. Specified diseases	M	20	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	162A
	F	22	22	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
CLASS XIII.—OLD AGE.																															
Total		58	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	10	12	25	4	2	2	....			
	M	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	10	3	1	....	....			
	F	38	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	8	8	15	1	1	2	....			
164. Senility	M	20	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	10	3	1	....	....			164
	F	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	8	8	15	1	1	2	....			

TABLE 34—CAUSES OF DEATH BY SEX AND AGE—TORONTO, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS XIV.—EXTERNAL CAUSES.																												
Total		417	18	9	5	12	7	18	11	15	18	24	28	31	17	25	18	15	23	24	32	16	20	22	7	....	1	1	
	M	270	12	6	3	9	3	13	9	11	13	14	20	19	15	20	17	11	12	13	20	7	7	12	2	....	1	1	
	F	147	6	3	2	3	4	5	2	4	5	10	8	12	2	5	1	4	11	11	12	9	13	10	5	....	....	....	
165-174. Suicides	M	39	....	....	....	....	....	....	....	2	2	2	4	7	1	4	6	3	3	2	3	....	....	....	....	....	....	....	165–
	F	29	....	....	....	....	....	....	....	....	2	6	4	7	....	1	....	2	3	2	2	....	....	....	....	....	....	....	....	174
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	4	....	....	....	....	....	....	....	....	1	....	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	165
	F	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
166. Suicide by corrosive substances	M	4	....	....	....	....	....	....	....	....	....	....	1	1	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	166
	F	11	....	....	....	....	....	....	....	....	....	4	1	4	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	
167. Suicide by poisonous gas	M	12	....	....	....	....	....	....	....	....	....	1	1	2	....	1	2	1	1	1	2	....	....	....	....	....	....	....	....	167
	F	7	....	....	....	....	....	....	....	....	....	1	1	1	....	1	....	2	1	....	....	....	....	....	....	....	....	....	....	
168. Suicide by hanging or strangulation	M	7	....	....	....	....	....	....	....	1	1	1	....	....	....	1	1	1	....	1	....	....	....	....	....	....	....	....	....	168
	F	3	....	....	....	....	....	....	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
169. Suicide by drowning	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	169
	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
170. Suicide by firearms	M	8	....	....	....	....	....	....	....	1	....	....	1	4	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	170
171. Suicide by cutting or piercing instruments	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	171
172. Suicide by jumping from high places	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	172
	F	5	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	
175. Poisoning by food	M	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	175
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	
177. Other acute accidental poisonings (gas excepted)	M	4	....	....	....	1	....	....	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	177
	F	4	....	....	....	....	....	....	....	....	....	2	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
178. Conflagration	M	3	....	....	....	1	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	178
	F	2	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
179. Accidental burns and scalds (conflagration excepted)	M	10	1	3	1	....	....	....	....	1	....	....	1	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	179
	F	15	1	3	2	....	2	2	....	....	....	....	....	1	1	....	....	....	2	1	....	....	....	....	....	....	....	....	....	
180. Accidental mechanical suffocation	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	180
	F	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
180A. Overlaying	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	180A
180B. Asphyxia	F	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	180B
181. Accidental absorption of irrespirable or poisonous gas	M	15	....	....	....	....	....	....	....	....	2	1	2	1	....	2	3	....	3	....	1	....	....	....	....	....	....	....	....	181
	F	6	....	....	....	....	....	....	....	....	1	....	....	1	1	....	....	1	....	1	1	....	....	....	....	....	....	....	....	

182. Accidental drowning	M	17				1		2	2	2	1	2	1	1		1	1				2	1							182
	F	2				1			1																				
183. Accidental traumatism by fire-arms	M	3								1	1			1															183
184. Accidental traumatism by cutting or piercing instruments	M	1															1												184
185. Accidental traumatism by fall	M	51	2	1						1	4	1	6	1	3	2	2	1	1	3	4	3	4	10	1		1		185
	F	51											2			1			4	6	7	6	12	8	5				
187. Accidental traumatism by machines	M	8										1	1		2		1		1	1	1								187
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	94		1	1	6	2	10	5	3	3	7	2	4	8	6	3	6	3	7	8	3	3	2	1				188
	F	24				2	2	3	1	2	1			2		1	1	1	1	1	2	3		1					
188A. Railroad accidents	M	8							1					1	2			2		1			1						188A
188B. Street car accidents	M	9														2		2		2	1	1	1						188B
	F	3									1										1	1							
188C. Automobile accidents	M	61				4	1	10	3	3	3	2	2	3	6	2	2	1	3	3	7	2	1	2	1				188C
	F	20				2	2	3	1	2				2		1	1	1	1	1	1	2							
188D. Aeroplane and balloon accidents	M	1										1																	188D
188E. Injuries by other vehicles	M	7		1		1			1							2	1			1									188E
188F. Other crushing	M	8			1	1	1					4						1											188F
	F	1																						1					
189. Injuries by animals (poisoning excepted)	M	2														2													189
195. Lightning	M	1								1																			195
196. Other accidental electric shocks	M	2							1									1											196
197-199, Homicides	M	14	7				1						2	1		2												1	197–199
	F	8	3							1	1	2	1																
197. Homicide by firearms	M	1												1															197
	F	2										1	1																
198. Homicide by cutting or piercing instruments	M	3					1						1			1													198
	F	1										1																	
199. Homicide by other means	M	10	7										1			1												1	199
	F	5	3							1	1																		
201. Fracture (cause not specified)	F	1																						1					201
202. Other external violence (cause specified)	M	4	1	1	1								1																202
	F	1														1													
CLASS XV.—ILL-DEFINED DISEASES.																													
Total		8														1	1				2	1	1	1	1				
	M	4														1	1				1			1					
	F	4																			1	1	1		1				
205. Cause of death not specified or ill-defined	M	4														1	1				1			1					205
	F	4																			1	1	1		1				
205C. Heart failure	M	4														1	1				1			1					205C
	F	4																			1	1	1		1				

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
DEATHS—ALL CAUSES, Total		1471	190	19	14	12	6	20	11	31	28	28	48	44	70	86	77	114	115	147	144	121	69	56	17	3	....	1	
	M	765	112	8	8	7	5	10	7	16	10	13	16	23	35	51	39	73	65	76	69	63	29	19	8	2	....	1	
	F	706	78	11	6	5	1	10	4	15	18	15	32	21	35	35	38	41	50	71	75	58	40	37	9	1	....	....	
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																													
Total		147	16	3	3	3	2	6	1	9	9	8	13	8	11	6	12	5	8	5	10	4	3	2	....	....	....	....	
	M	75	9	1	2	2	1	2	1	1	1	5	5	6	7	4	6	5	5	3	7	1	....	1	....	....	....	....	
	F	72	7	2	1	1	1	4	....	8	8	3	8	2	4	2	6	....	3	2	3	3	3	1	....	....	....	....	
1. Typhoid and paratyphoid fever	M	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1
	F	3	....	....	....	....	....	....	....	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
1A. Typhoid fever	M	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1A
	F	3	....	....	....	....	....	....	....	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	
7. Measles	F	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
8. Scarlet fever	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8
9. Whooping-cough	M	5	3	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
10. Diphtheria	M	5	....	....	1	1	....	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	10
	F	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11. Influenza	M	25	2	1	....	....	....	....	....	....	1	1	1	4	2	1	1	1	2	2	4	1	....	1	....	....	....	....	11
	F	22	1	1	....	....	....	1	....	1	....	....	3	1	1	....	....	....	2	1	3	3	3	1	....	....	....	....	
11A. Influenza, sole cause	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	11A
	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11C. Influenza, with bronchitis	M	3	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	11C
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	
11D. Influenza, with pneumonia	M	13	2	1	....	....	....	....	....	....	1	1	1	2	....	1	....	....	....	2	2	....	....	....	....	....	....	....	11D
	F	16	....	1	....	....	....	....	....	....	....	....	2	1	1	....	....	....	2	1	3	1	3	1	....	....	....	....	
11E. Influenza, with other respiratory diseases	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	11E
11G. Influenza, with other causes	M	7	....	....	....	....	....	....	....	....	....	....	....	2	1	....	1	....	1	....	....	1	....	1	....	....	....	....	11G
	F	4	1	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	
16. Dysentery	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	16
21. Erysipelas	M	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	21
	F	4	1	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	
22. Acute anterior poliomyelitis	F	2	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	22
23. Lethargic encephalitis	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	23
24. Meningococcus meningitis	M	2	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	24
25. Other epidemic and endemic diseases	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	25

25A. Chicken-pox	M	1	1																											25A
29. Tetanus	M	1																				1								29
	F	1						1																						
30. Mycoses	M	1	1																											30
31-37. Tuberculosis. Total	M	20				1				1		3	2	1	3	2	4	1	1		1									31–37
	F	29	2					1		6	8	2	2		2	1	4		1											
31. Tuberculosis of the respiratory system	M	15								1		2	2	1	2	2	3	1	1											31
	F	18								3	6	2	2		1	1	3													
32. Tuberculosis of the meninges and central nervous system	M	2				1									1															32
	F	4	1					1			2																			
33. Tuberculosis of the intestines and peritoneum	F	1	1																											33
34 Tuberculosis of the vertebral column	M	3										1					1				1									34
35. Tuberculosis of the joints	F	1															1													35
36. Tuberculosis of other organs	F	1													1															36
36D. Tuberculosis of the genito-urinary system	F	1													1															36D
37. Disseminated tuberculosis	F	4								3									1											37
37A. Disseminated tuberculosis, acute	F	4								3									1											37A
38. Syphilis	M	5	1										1			1		1	1											38
	F	2												1	1															
41. Purulent infection, septicaemia	M	6												1	2		1	1		1										41
	F	3	1		1								1																	
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.																														
Total		238	6				1	2		1	4	2	2	6	17	24	17	30	36	36	23	20	6	3	2					
	M	119	4				1	2			2	1		4	7	11	7	16	17	20	8	13	3	2	1					
	F	119	2							1	2	1	2	2	10	13	10	14	19	16	15	7	3	1	1					
43-49, Cancer. Total	M	86	1					1			2			2	5	9	4	14	12	14	7	10	3	1	1					43–49
	F	91									2	1	2	1	6	11	8	12	13	14	12	4	3	1	1					
43. Cancer of the buccal cavity	M	6																2				2		1	1					43
44. Cancer of the stomach and liver	M	28	1											1	3	4	3	5	1	3	2	4	1							44
	F	23														1	1	3	6	4	2	2	3		1					
45, Cancer of the peritoneum, intestines and rectum	M	9													1			2	1	4	1									45
	F	22									2				3	4	2	1	3	5	2									
46. Cancer of the female genital organs	F	16										1	2	1	1	2	3	1	2	1	2									46
47. Cancer of the breast	F	16													1	1	2	5	1	1	3	1		1						47
48. Cancer of the skin	M	2																	1	1										48
49. Cancer of other or unspecified organs	M	41						1			2			1	1	5	1	5	9	6	4	4	2							49
	F	14													1	3		2	1	3	3	1								
49A. Cancer of the eye and ear	F	1													1															49A

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
49B. Cancer of the circulatory system	M	3									1			1						1								49B
	F	4														3				1								
49C. Cancer of the respiratory system	M	10														1		4	3		1	1						49C
	F	1																	1									
49D. Cancer of the digestive system	M	5									1					1	1		2									49D
	F	1																		1								
49E. Cancer of the genito-urinary organs	M	21													1	2		1	4	5	3	3	2					49E
	F	2																			1	1						
49F. Cancer of the bones and joints	M	1						1																				49F
	F	2																1			1							
49G. Cancer of other specified organs	M	1														1												49G
49H. Generalized cancer	F	2																1			1							49H
49I. Cancer, unspecified	F	1																		1								49I
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	1														1												50
	F	1																		1								
51. Acute rheumatic fever	M	2						1													1							51
	F	1												1														
52. Chronic rheumatism, osteo-arthritis, gout	M	1																				1						52
	F	1																				1						
56. Rickets	M	2	2																									56
57. Diabetes mellitus	M	10												1			1	1	2	2		2		1				57
	F	10															1	1	3		3	2						
58. Anaemia, chlorosis	M	4																	2	2								58
	F	1																		1								
58A. Pernicious anaemia	M	4																	2	2								58A
	F	1																		1								
60. Diseases of the thyroid gland	M	2														1				1								60
	F	7													1	2		1	3									
60A. Exophthalmic goiter	F	3													1	1			1									60A
60B. Other diseases of the thyroid gland	M	2														1				1								60B
	F	4														1		1	2									
62. Diseases of the thymus	M	2	1				1																					62
	F	2	1							1																		
63. Diseases of the adrenals (Addison's disease)	F	1													1													63
65. Leukaemia, lymphadenoma	M	3										1						1		1								65

65A. Leukaemia	M	1																1											65A
65B. Lymphadenoma (Hodgkin's disease)	M	2										1								1									65B
66. Alcoholism	M	5											1	2		1		1											66
	F	1														1													
66B. Acute alcoholism	M	4											1	1		1		1											66B
	F	1														1													
66C. Chronic alcoholism	M	1												1															66C
67. Chronic poisoning by mineral substances	M	1														1													67
67A. Chronic lead poisoning	M	1														1													67A
68. Chronic organic poisoning	F	1												1															68
68C. Other organic poisoning	F	1												1															68C
69. Other general diseases	F	2	1											1															69
69B. Haemophilia	F	1	1																										69B
69C. Purpura haemorrhagica	F	1												1															69C
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																													
Total		121	5		1	2	1	1	2	4	1	1	3	2	6	11	7	16	8	11	16	9	9	2	1	1		1	
	M	69	4			1	1	1	1	3		1	1	1	3	8	3	9	4	7	9	3	6	1		1		1	
	F	52	1		1	1			1	1	1		2	1	3	3	4	7	4	4	7	6	3	1	1				
70, Encephalitis	M	2	1							1																			70
	F	3				1							2																
70A. Abscess of brain	M	2	1							1																			70A
	F	1											1																
70B. Encephalitis	F	2				1							1																
71. Meningitis	M	3						1	1	1																			71
	F	3							1		1											1							
71A. Simple meningitis	M	3						1	1	1																			71A
	F	3							1		1										1								
72. Tabes dorsalis (locomotor ataxia)	M	1														1													72
73. Other diseases of the spinal cord	M	2																1		1									73
	F	3													1				1	1									
74. Cerebral haemorrhage, apoplexy	M	48	1							1			1	2	5	3	5	3	7	8	3	6	1		1		1	74
	F	33												2	1	4	6	3	2	5	5	3	1	1				
74A. Apoplexy	M	16														2	2	3	2	3	1	1	1		1			74A
	F	14													1	1	2	2	1	3	1	1	1	1				
74B. Cerebral haemorrhage	M	28	1							1			1	2	3	1	3		4	5	1	5					1	74B
	F	19												2		3	4	1	1	2	4	2						
74C. Cerebral thrombosis and embolism	M	4													2				1		1							74C
75. Paralysis without specified cause	M	1																1										75
	F	1																	1									
75A. Hemiplegia	M	1																1										75A
	F	1																	1									
78. Epilepsy	M	2				1									1														78
80. Infantile convulsions (under 5 years of age)	M	2	2																										80
	F	1	1																										

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
81. Chorea	F	1																	1									81
82. Neuralgia and neuritis	F	1																			1							82
84. Other diseases of the nervous system	M	6											1			2		3										84
	F	6			1					1				1		2		1										
85. Diseases of the eye and annexa	M	1										1																85
86. Diseases of the ear and of the mastoid process	M	1					1																					86
86A. Diseases of the ear	M	1					1																					86A
CLASS IV —DISEASES OF THE CIRCULATORY SYSTEM.																												
Total		326				2		1	1	2	1	3	2	1	10	13	16	28	34	52	38	56	33	27	5	1		
	M	169				1				2	1	1	1	1	1	10	9	18	20	25	18	31	15	11	3	1		
	F	157				1		1	1			2	1		9	3	7	10	14	27	20	25	18	16	2			
87-90. Diseases of the heart	M	102				1				2	1	1	1	1	1	7	5	12	11	17	12	18	3	7	1	1		87-90
	F	114				1		1	1			2	1		8	3	5	9	7	20	11	18	13	12	2			
87. Pericarditis	F	1				1																						87
88. Endocarditis and myocarditis (acute)	M	3				1												2										88
	F	6													2	1	2					1						
88A. Acute endocarditis	M	2																2										88A
	F	1														1												
88B. Acute myocarditis	M	1				1																						88B
	F	5													2		2					1						
89. Angina pectoris	M	8																1	3	3		1						89
	F	3														1				1		1						
90. Other diseases of the heart	M	91								2	1	1	1	1	1	7	5	9	8	14	12	17	3	7	1	1		90
	F	104						1	1			2	1		6	1	3	9	7	19	11	17	12	12	2			
90A. Valvular disease	M	11								1	1					4		1		1	1	2		1				90A
	F	15										1	1		2			1	1	3	2	2	1		1			
90D. Chronic endocarditis	M	6								1				1		1		1		1	1							90D
	F	7						1	1			1			2					1	1							
90E. Chronic myocarditis	M	63										1	1		1	5		8	7	10	9	11	3	6	1			90E
	F	71													2	1	3	8	4	13	8	13	10	8	1			
90F. Others under this title	M	11														1	1		1	2	1	4				1		90F
	F	11																	2	2		2	1	4				
91. Diseases of the arteries	M	65														2	4	6	8	8	6	13	12	4	2			91
	F	42													1		1	1	7	7	9	7	5	4				
91A. Aneurysm	M	5														1	3			1								91A
	F	1																		1								

91B. Arteriosclerosis	M	60	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	6	8	7	6	13	12	4	2	....	....	....	91B
	F	41	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	1	7	6	9	7	5	4	....	....	....	
92, Embolism and thrombosis (not cerebral)	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	92
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	93
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.																													
Total		162	31	11	7	1	....	2	....	1	2	2	1	6	4	8	7	7	8	17	15	10	9	9	4	....	....	....	
	M	87	20	7	4	1	....	2	....	1	2	1	....	4	2	6	4	5	5	7	8	4	2	1	1	....	....	....	
	F	75	11	4	3	....	....	....	....	....	....	1	1	2	2	2	3	2	3	10	7	6	7	8	3	....	....	....	
98. Diseases of the larynx	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	98
98B. Laryngitis	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	98B
99. Bronchitis	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	99
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	
99A. Bronchitis, acute	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	99A
99B. Bronchitis, chronic	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	99B
100. Broncho-pneumonia (including capillary bronchitis)	M	26	14	5	2	1	....	1	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	1	....	....	....	100
	F	24	7	3	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	5	1	2	2	....	....	....	
100A. Broncho-pneumonia	M	26	14	5	2	1	....	1	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	1	....	....	....	....	100A
	F	24	7	3	2	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	5	1	2	2	....	....	....	
101. Pneumonia	M	44	4	2	2	....	....	....	....	1	1	1	....	2	2	4	3	5	3	4	6	3	1	....	....	....	....	....	101
	F	41	2	1	1	....	....	....	....	....	....	....	....	1	1	2	3	2	3	7	6	1	5	6	....	....	....	....	
101A. Pneumonia, lobar	M	28	2	....	2	....	....	....	....	1	....	....	....	2	1	3	2	5	1	3	3	2	1	....	....	....	....	....	101A
	F	27	....	1	1	....	....	....	....	....	....	....	....	1	....	2	3	1	3	4	4	1	3	3	....	....	....	....	
101B. Pneumonia, not otherwise defined	M	16	2	2	....	....	....	....	....	....	1	1	....	....	1	1	1	....	2	1	3	1	....	....	....	....	....	....	101B
	F	14	2	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	3	2	....	2	3	....	....	....	....	
102. Pleurisy	M	6	1	....	....	....	....	....	....	....	1	....	....	1	....	1	....	....	1	1	....	....	....	....	....	....	....	....	102
	F	3	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
103. Congestion and haemorrhagic infarct of the lung	M	4	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	....	....	....	....	103
	F	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	
105. Asthma	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	105
	F	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	107
	F	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	
107C. Others under this title	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	107C
	F	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	
CLASS VI —DISEASES OF THE DIGESTIVE SYSTEM.																													
Total		108	38	3	1	....	1	1	2	1	2	2	5	4	6	10	4	7	4	7	6	1	....	2	....	1	....	....	
	M	51	21	....	1	....	1	1	1	1	1	2	3	1	2	4	3	4	1	2	2	....	....	....	....	....	....	....	
	F	57	17	3	....	....	....	....	1	....	1	....	2	3	4	6	1	3	3	5	4	1	....	2	....	1	....	....	
108. Diseases of the mouth and annexa	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	108

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	1												1														109
	F	3	1										1		1														
109B. Pharynx and tonsils	M	1												1														109B
	F	3	1										1		1														
110. Diseases of the oesophagus	M	1																		1								110
111. Ulcer of the stomach and duodenum	M	11										1	2		2	2	1	2		1								111
	F	6														1		2	1	1		1						
111A. Ulcer of the stomach	M	5										1				1	1	1		1								111E
	F	5														1		2	1			1						
111B. Ulcer of the duodenum	M	6											2		2	1		1										111B
	F	1																		1								
112. Other diseases of the stomach (cancer excepted)	M	1	1																									112
	F	1																			1							
113. Diarrhoea and enteritis (under 2 years of age)	M	19	19																									113
	F	15	12	3																								
114. Diarrhoea and enteritis (2 years or over)	M	3			1						1		1															114
	F	1																		1								
117. Appendicitis and typhlitis	M	5					1	1		1						1	1											117
	F	5							1				1	1						2								
118. Hernia, intestinal obstruction	M	5	1						1								1	1			1							118
	F	7	2													2			1	1	1							
118A. Hernia	M	1															1											118A
	F	2														1			1									
118B. Intestinal obstruction	M	4	1						1									1			1							118B
	F	5	2													1				1	1							
119. Other diseases of the intestines	M	1										1																119
	F	3	1																		1				1			
122. Cirrhosis of the liver	M	1																1										122
	F	5									1				1	1			1		1							
122B. Cirrhosis of the liver (not specified as alcoholic)	M	1																1										122B
	F	5									1				1	1			1		1							
123. Billary calculi	F	2												1				1										123
124. Other diseases of the liver	M	2														1			1									124
	F	3													1	1							1					
125. Diseases of the pancreas	F	3													1	1	1											125
126. Peritonitis without specified cause	M	1																		1								126
	F	2	1											1														

CLASS VII —NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																													
Total		125	3	....	....	....	....	....	2	2	1	3	6	2	5	8	8	12	10	17	21	15	5	4	1	....	....	....	
	M	70	2	....	....	....	....	....	1	....	....	1	2	2	2	3	4	8	8	12	13	7	2	2	1	....	....	....	
	F	55	1	....	....	....	....	....	1	2	1	2	4	....	3	5	4	4	2	5	8	8	3	2	....	....	....	....	
128. Acute nephritis (including unspecified, under 10 years of age)	M	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	128
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	
129. Chronic nephritis (Bright's Disease)	M	43	....	....	....	....	....	....	....	....	....	1	2	1	2	3	2	6	7	6	9	2	2	....	....	....	....	....	....	129
	F	40	....	....	....	....	....	....	1	1	....	2	1	....	....	3	3	4	2	5	6	8	3	1	....	....	....	....	....	
131. Other diseases of the kidneys and annexa	M	5	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	131
	F	6	1	....	....	....	....	....	....	1	....	....	....	....	....	1	1	....	....	....	1	....	....	1	....	....	....	....	....	
132. Calculi of the urinary passages	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	132
133. Diseases of the bladder	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	133
135. Diseases of the prostate	M	17	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	5	1	5	....	2	1	....	....	....	....	....	135
137. Cysts and other benign tumours of the ovary	F	2	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	137
139. Benign tumouts of the uterus.	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	139
141. Other diseases of the female genital organs	F	4	....	....	....	....	....	....	....	....	1	....	1	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	141
CLASS VIII —THE PUERPERAL STATE.																													
Total		29	....	....	....	....	....	....	....	2	4	4	10	9	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
143. Accidents of pregnancy	F	4	....	....	....	....	....	....	....	....	1	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143
143A. Abortion	F	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143A
143B. Ectopic gestation	F	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143B
143D. Abortion, self-induced	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	143D
144. Puerperal haemorrhage	F	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	144
145. Other accidents of labour	F	5	....	....	....	....	....	....	....	1	....	....	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	145
145A. Caesarean section	F	2	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	145E
145C. Other surgical operations and instrumental delivery	F	3	....	....	....	....	....	....	....	1	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	145C
146. Puerperal septicaemia	F	7	....	....	....	....	....	....	....	1	2	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	146
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	3	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	147
148. Puerperal albuminuria and convulsions	F	6	....	....	....	....	....	....	....	....	1	1	1	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	148
149. Following childbirth (not (otherwise defined)	F	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	149

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS IX,—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																												
Total		7	3	....	....	....	....	....	....	....	....	1	....	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	
	M	5	3	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	
	F	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
153. Acute abscess	M	4	2	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	153
	F	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
154. Other diseases of the skin and annexa	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	154
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION																												
Total		2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
	M	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
155, Diseases of the bones (mastoid and tuberculosis excepted)	M	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	155
CLASS XI.—MALFORMATIONS.																												
Total		13	10	1	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	M	6	5	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
	F	7	5	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159. Congenital malformations (stillbirths not included)	M	6	5	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159
	F	7	5	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159A. Congenital hydrocephalus	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159A
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
159B. Congenital malformations of the heart	F	3	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159B
159C. Others under this title	M	4	3	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	159C
	F	3	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	

CLASS XII.—DISEASES OF EARLY INFANCY,																														
Total		77	77																											
	M	43	43																											
	F	34	34																											
160. Congenital debility, icterus and sclerema	M	7	7																											160
	F	10	10																											
161. Premature birth, injury at birth	M	31	31																											161
	F	21	21																											
161A. Premature birth	M	23	23																											161A
	F	17	17																											
161B. Injury at birth	M	8	8																											161B
	F	4	4																											
162. Other diseases peculiar to early infancy	M	5	5																											162
	F	3	3																											
162A. Specified diseases	M	5	5																											162A
	F	3	3																											
CLASS XIII —OLD AGE.																														
Total		14																1			3	1	1	6	2				
	M	2																1				1								
	F	12																			3		1	6	2				
164. Senility	M	2																1				1								164
	F	12																			3		1	6	2				
CLASS XIV.—EXTERNAL CAUSES.																														
Total		97	1		1	3	1	7	2	9	4	2	6	5	9	6	5	6	6	2	12	4	3	1	2				
	M	64	1			2	1	2	2	8	3	1	4	4	9	5	3	5	4		4	2	1	1	2				
	F	33			1	1		5		1	1	1	2	1		1	2	1	2	2	8	2	2						
165-174. Suicides	M	6								1				1	2							2								165-174
	F	2								1			1																	
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	1																				1								165
	F	1								1																				
166. Suicide by corrosive substances	M	1								1																				166
	F	1											1																	
168. Suicide by hanging or strangulation	M	2												1	1															168
169. Suicide by drowning	M	1																				1								169

TABLE 35—CAUSES OF DEATH BY SEX AND AGE—HAMILTON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
172. Suicide by jumping from high places	M	1													1													172
175. Poisoning by food	M	1	1																									175
177. Other acute accidental poisonings (gas excepted)	M	1													1													177
179. Accidental burns and scalds (conflagration excepted)	M	1											1															179
	F	2																	1		1							
181. Accidental absorption of irrespirable or poisonous gas	M	2									1					1												181
	F	2											1															
182. Accidental drowning	M	6						1	1	1					1			1	1				1					182
183. Accidental traumatism by firearms	M	1								1																		183
184. Accidental traumatism by cutting or piercing instruments	F	1			1																							184
185. Accidental traumatism by fall	M	8				1									2	1		1	1		1				1			185
	F	7				1												1			3	2						
186. Accidental traumatism in mines and quarries	M	1									1																	186
186A. Coal mines	M	1									1																	186A
187. Accidental traumatism by machines	M	3											1				1		1									187
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	24				1	1	1	1	4	1			3	2	4		3	1		1		1					188
	F	14						5			1	1				1	1			1	4							
188A. Railroad accidents	M	2												1	1													188A
	F	1										1																
188C. Automobile accidents	M	16				1	1	1	1	4				1	1	2		2			1		1					188C
	F	13						5			1					1	1			1	4							
188D. Aeroplane and balloon accidents	M	1									1																	188D
188E. Injuries by other vehicles	M	2														1			1									188E
188F. Other crushing	M	3												1		1		1										188F
196. Other accidental electric shocks	M	2													1		1											196
197-199. Homicides	M	3										1	2															197–
	F	1												1														199
197. Homicide by firearms	M	1											1															197
199. Homicide by other means	M	2										1	1															199
	F	1												1														
201. Fracture (cause not specified)	M	3																			1			1	1			201
	F	4															1		1	1		1						
202. Other external violence (cause specified)	M	2								1											1							202

CLASS XV.—ILL-DEFINED DISEASES,																															
Total		5	....	1	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	....	1	....	....	....	....	....	....		
	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	....	....		
	F	2	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....		
205. Cause of death not specified or ill-defined	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	....	....		205
	F	2	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....		205A
205A. Ill-defined	F	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....		205C
205C. Heart failure	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	....	....		
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....		

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
DEATHS—ALL CAUSES. Total...		1645	320	40	21	10	7	28	24	34	50	47	48	46	56	64	70	90	109	133	135	143	92	59	17	2	....	....	
	M	853	186	23	8	5	4	14	16	22	24	18	19	19	29	39	34	53	59	76	71	70	43	19	2	....	....	....	
	F	792	134	17	13	5	3	14	8	12	26	29	29	27	27	25	36	37	50	57	64	73	49	40	15	2	....	....	
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																													
Total.....		236	41	13	6	5	7	9	6	8	19	19	13	8	13	11	10	6	3	8	7	12	6	4	2	....	....	....	
	M	109	19	7	3	2	4	3	4	3	5	4	4	5	6	7	6	4	3	3	2	8	4	3	....	....	....	....	
	F	127	22	6	3	3	3	6	2	5	14	15	9	3	7	4	4	2	....	5	5	4	2	1	2	....	....	....	
1. Typhoid and paratyhpoid fever.....	M	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
1A. Typhoid fever.....	M	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1A
4. Undulant fever.....	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	4
8. Scarlet fever.....	M	4	....	1	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8
	F	3	....	....	....	1	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
9. Whooping-cough.....	M	3	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
	F	14	13	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
10. Diphtheria.....	M	8	2	1	....	1	3	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
	F	15	3	2	3	2	2	2	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11. Influenza.....	M	29	6	2	2	1	1	....	1	1	....	1	....	....	....	....	1	....	....	1	2	7	2	1	....	....	....	....	11
	F	35	2	2	....	....	....	3	....	1	....	3	1	1	4	1	1	....	....	3	5	3	2	1	2	....	....	....	
11A. Influenza, sole cause.....	F	3	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	11A
11B. Influenza, with phthisis.....	M	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11B
	F	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11C. Influenza, with bronchitis...	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	11C
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	
11D. Influenza, with pneumonia..	M	15	4	1	1	1	1	....	....	....	....	....	....	....	....	....	1	....	....	....	1	4	1	....	....	....	....	....	11D
	F	12	2	1	....	....	....	....	....	1	....	....	1	....	1	1	1	....	....	....	1	2	....	....	1	....	....	....	
11E. Influenza, with other respiratory diseases.....	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11E
11F. Influenza, with diseases and accidents of pregnancy and parturition.....	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	11F
11G. Influenza, with other causes.	M	11	2	1	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	1	1	3	....	1	....	....	....	....	11G
	F	16	....	....	....	....	....	3	....	....	....	3	....	....	2	....	....	....	....	2	3	1	1	....	1	....	....	....	
13. Mumps.....	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	13
21. Erysipelas.....	M	5	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	1	1	1	....	....	....	....	21
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
22. Acute anterior poliomyelitis..	F	2	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	22
23. Lethargic encephalitis.....	M	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	23
	F	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	

24. Meningococcus meningitis	M	2	2																											24
25. Other epidemic and endemic diseases	M	1	1																											25
25A. Chicken-pox	M	1	1																											25A
29. Tetanus	M	1								1																				29
31-37. Tuberculosis. Total	M	40	3	1					2	1	5	2	3	3	6	3	4	4	1	1				1						31–37
	F	52	3	1						3	12	12	7	2	3	2	3	2		1		1								
31. Tuberculosis of the respiratory system	M	31	1						1	1	3	2	3	3	5	2	4	4	1					1						31
	F	43	1	1						2	11	10	6	2	2	2	3	2		1										
32. Tuberculosis of the meninges and central nervous system	M	2	1	1																										32
	F	1	1																											
33. Tuberculosis of the intestines and peritoneum	M	3							1		1									1										33
	F	4								1		1			1							1								
34. Tuberculosis of the vertebral column	M	1													1															34
	F	1											1																	
35. Tuberculosis of the joints	M	1														1														35
	F	1									1																			
36. Tuberculosis of other organs	M	1									1																			36
	F	1										1																		
36D. Tuberculosis of the genito-urinary system	M	1									1																			36D
	F	1										1																		
37. Disseminated tuberculosis	M	1	1																											37
	F	1	1																											
37A. Disseminated tuberculosis, acute	M	1	1																											37A
	F	1	1																											
38. Syphilis	M	6	3													2			1											38
40. Gonococcus infection	M	1														1														40
41. Purulent infection, septicaemia	M	3	1										1						1											41
	F	4					1			1						1				1										
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I,																														
Total		207	5	1	1			1	1	5	2	1	4	11	5	13	12	24	36	34	15	26	7	2	1					
	M	98	3	1						4	1			2	3	7	4	12	15	21	10	11	2	1	1					
	F	109	2		1			1	1	1	1	1	4	9	2	6	8	12	21	13	5	15	5	1						
43-49. Cancer. Total	M	64								1				1	2	3	4	6	11	16	9	8	1	1	1					43–49
	F	77			1			1		1		1	3	6	1	4	5	11	16	10	2	11	4							
43. Cancer of the buccal cavity	M	4																		3		1								43
	F	1																			1									
44. Cancer of the stomach and liver	M	30													1	1	1	2	7	6	6	4	1	1						44
	F	21														1	1	2	5	6	1	3	2							
45. Cancer of the peritoneum, intestines and rectum	M	8													1	1		2	1	2	1									45
	F	9											1	1		1		1	2			2	1							

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																								
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
46. Cancer of the female genital organs	F	17												2		2	2	4	3			4						46
47. Cancer of the breast	F	14											1	2	1		1	2	2	2		2	1					47
48. Cancer of the skin	M	1																		1								48
49. Cancer of other or unspecified organs	M	21								1				1		1	3	2	3	4	2	3			1			49
	F	15			1			1		1		1	1	1			1	2	4	2								49A
49A. Cancer of eye and ear	F	2																1		1								49B
49B. Cancer of circulatory system	M	3								1				1							1							49C
	F	2																										49D
49C. Cancer of respiratory system	M	2															1		2									49E
	F	1															1		1									49F
49D. Cancer of digestive system	M	3															1											49G
	F	2															1			1		1						49H
49E. Cancer of genito-urinary organs	M	12														1	1	1	2	3	1	2			1			50
	F	3			1			1					1															51
49F. Cancer of bones and joints	F	2								1																		52
49G. Cancer of other specified organs	M	1																	1									56
	F	2															1											57
49H. Generalized cancer	F	1										1							1									58
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	3	1											1														58A
	F	1																			2							58B
51. Acute rheumatic fever	M	2								1							1											60
	F	3							1					1		1			1									60A
52. Chronic rheumatism, osteo-arthritis, gout	F	1																										60B
56. Rickets	F	1	1																1									
57. Diabetes mellitus	M	8								1				1		1		3	1	1								
	F	12										1		1	1		1		1	2	2	2		1				
58. Anaemia, chlorosis	M	6														1		1	2	1		1						
	F	6															1	1	2	1		1						
58A. Pernicious anemia	M	5														1		2		1	1	1						
	F	5															1	1	1	1		1						
58B. Other anaemias and chlorosis	M	1														1		2			1	1						
	F	1																	1									
60, Diseases of the thyroid gland	M	3								1							2				1							
	F	5											1				1	1	1		1							
60A. Exophthalmic goiter	M	2								1								1										
	F	2															1		1									
60B. Other diseases of the thyroid gland	M	1																1										
	F	3											1					1			1							

62. Diseases of the thymus	M	1	1																										62
	F	1	1																										
64. Diseases of the spleen	M	1													1														64
65. Leukaemia, lymphadenoma	M	5	1							1									2		1								65
	F	1																	1										
65A. Leukaemia	M	5	1							1									2		1								65A
65B. Lymphadenoma (Hodgkin's disease)	F	1																	1										65B
66. Alcoholism	M	3														2		1											66
66A. Delirium tremens	M	1														1													66A
66B. Acute alcoholism	M	2														1		1											66B
67. Chronic poisoning by mineral substances	M	1														1													67
67A. Chronic lead poisoning	M	1														1													67A
69. Other general diseases	M	1		1																									69
	F	1												1															
69C. Purpura haemorrhagica	F	1												1															69C
69D. Others under this title	M	1		1																									69D
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																													
Total		108	11	4	1	1		4	2	1	2	2	5	1	3	2	4	6	7	15	16	10	7	2	2				
	M	49	6	2		1		2	2		1	2	1		1		1	3	2	9	7	6	2	1					
	F	59	5	2	1			2		1	1		4	1	2	2	3	3	5	6	9	4	5	1	2				
70. Encephalitis	M	3						1			1	1																	70
70B. Encephalitis	M	3						1			1	1																	70B
71. Meningitis	M	1	1																										71
	F	5	2		1			1					1																
71A. Simple meningitis	M	1	1																										71A
	F	5	2		1			1					1																
73. Other diseases of the spinal cord	M	5																		3	1	1							73
	F	4													1					1	1		1						
74. Cerebral haemorrhage, apoplexy	M	16															1		1	5	4	2	2	1					74
	F	27												1	1	1	3	2	3	4	6	2	3		1				
74A. Apoplexy	M	4																		3	1								74A
	F	8												1		1				2	2		2						
74B. Cerebral haemorrhage	M	9															1			1	3	1	2	1					74B
	F	16													1		3	2	2	1	3	2	1		1				
74C. Cerebral thrombosis and embolism	M	3																	1	1		1							74C
	F	3																	1	1	1								
75. Paralysis without specified	M	5																1	1		2	1							75
	F	8																	1	1	2	1	1	1					
75A. Hemiplegia	M	4																1	1		1	1							75A
	F	5																		1	1		1	1	1				
75B. Others under this title	M	1																			1								75B
	F	3																	1		1	1							
77. Other forms of mental alienation	M	2																2											77
	F	1											1																
78. Epilepsy	M	2						1	1																				78
	F	3		1						1			1																

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
80. Infantile convulsions (under 5 years of age)	M	2	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	80
	F	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
81. Chorea	M	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	81
82. Neuralgia and neuritis	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	82
83. Softening of the brain	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	83
84. Other diseases of the nervous system	M	4	....	....	....	....	....	....	....	....	....	1	1	....	1	....	....	....	....	1	....	....	....	....	....	....	....	84
	F	5	1	....	....	....	....	1	....	....	....	....	....	....	....	1	....	1	....	....	....	1	....	....	....	....	....	....	
86. Diseases of the ear and of the mastoid process	M	7	4	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	86
	F	3	....	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
86A. Diseases of the ear	M	4	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	86A
	F	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
86B. Diseases of the mastoid process	M	3	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	86B
	F	2	....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM,																												
Total		349	....	....	....	....	....	1	1	2	7	7	5	6	7	12	17	29	24	39	54	56	43	29	9	1	....	....	
	M	173	....	....	....	....	....	1	1	1	5	2	4	4	4	8	9	19	17	24	26	25	20	2	1	....	....	
	F	176	....	....	....	....	....	....	....	1	2	5	1	2	3	4	8	10	7	15	28	31	23	27	8	1	....	....	
87-90. Diseases of the heart	M	123	....	....	....	....	....	1	1	1	5	2	3	4	4	4	6	13	15	16	18	17	10	2	1	....	....	87-90
	F	123	....	....	....	....	....	....	....	1	2	5	1	2	2	3	7	9	5	8	21	23	15	13	5	1	....	....	
87. Pericarditis	M	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	87
88. Endocarditis and myocarditis (acute)	M	10	....	....	....	....	....	....	....	....	1	....	1	1	....	1	....	2	3	1	....	....	....	....	....	....	....	....	88
	F	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
88A. Acute endocarditis	M	8	....	....	....	....	....	....	....	....	1	....	1	1	....	1	....	2	1	1	....	....	....	....	....	....	....	....	88A
88B. Acute myocarditis	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	88B
	F	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
89. Angina pectoris	M	25	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1	4	4	6	4	3	1	....	....	....	....	....	89
	F	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1	4	2	1	1	....	....	....	....	
90. Other diseases of the heart	M	87	....	....	....	....	....	1	1	1	4	2	2	2	2	3	5	7	8	9	14	14	9	2	1	....	....	90
	F	110	....	....	....	....	....	....	....	1	2	4	1	2	2	3	5	8	5	7	17	21	14	12	5	1	....	....	
90A. Valvular disease	M	10	....	....	....	....	....	....	....	....	2	....	....	....	1	....	1	1	....	2	2	....	1	....	....	....	....	....	90A
	F	11	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	1	1	2	2	1	1	....	....	....	
90D. Chronic endocarditis	M	16	....	....	....	....	....	....	1	....	2	2	1	....	1	1	1	1	2	....	1	....	1	....	....	....	....	....	90D
	F	16	....	....	....	....	....	....	....	1	1	1	....	1	1	....	2	1	....	2	3	2	....	1	....	....	....	....	
90E. Chronic myocarditis	M	47	....	....	....	....	....	....	....	1	....	....	1	1	....	1	1	5	5	4	8	12	7	....	1	....	....	....	90E
	F	70	....	....	....	....	....	....	....	....	....	....	....	1	1	3	1	3	3	3	13	17	11	10	3	1	....	....	

90F. Others under this title	M	14						1						1		1	2		1	1	4	1	1	1					90F
	F	13									1	3	1				1	3	1	1				1		1				
91. Diseases of the arteries	M	49											1			4	3	6	1	8	8	8	10							91
	F	50													1	1	1		1	7	6	8	8	14	3					
91A. Aneurysm	M	4														1		1		2										91A
	F	2														1						1								
91B. Arteriosclerosis	M	45											1			3	3	5	1	6	8	8	10							91B
	F	47													1		1		1	7	6	6	8	14	3					
91C, Other diseases of the arterics.	F	1																				1								91C
93. Diseases of the veins (varices, haemorrhoids, phlebitis etc.)	M	1																	1											93
	F	1																			1									
94. Diseases of the lymphatic system (lymphangitis, etc.)	F	1																	1											94
95. Haemorrhage without specified cause	F	1																1												95
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM,																														
Total		128	31	7	7	2		2	1	2	3	3	3	5	7	5	3	5	10	8	7	6	6	4	1					
	M	74	23	6	2	1		1		1	1	1	3	2	3	4	3	5	5	3	4	1	3	2						
	F	54	8	1	5	1		1	1	1	2	2		3	4	1			5	5	3	5	3	2	1					
98. Diseases of the larynx	F	1	1																											98
98C. Croup	F	1	1																											98C
99. Bronchitis	M	1		1																										99
	F	1																				1								
99A, Bronchitis, acute	M	1	1																											99A
99D. Bronchitis, not otherwise defined, 5 years or over	F	1																				1								99D
100, Broncho-pneumonia (including capillary bronchitis)	M	25	15	3	1											2		1	1				1	1						100
	F	16	5	1	2						1								3	1	1	2								
100A, Broncho-pneumonia	M	24	15	3	1											2		1	1				1							100A
	F	16	5	1	2						1								3	1	1	2								
100B. Capillary bronchitis	M	1																						1						100B
101. Pneumonia	M	35	7	1		1		1		1	1		3	2	1	2	2	3	2	1	4		2	1						101
	F	26	2		3	1		1	1	1	1	1		3	1	1			1	3	2	2	1	1						
101A. Pneumonia, lobar	M	22	4							1	1		3	1		2	2	3		1	2		1	1						101A
	F	15	1		2	1		1	1	1		1		2	1					2		1	1							
101B, Pneumonia, not otherwise defined	M	13	3	1		1		1						1	1				2		2		1							101B
	F	11	1		1						1			1		1			1	1	2	1		1						
102. Pleurisy	M	7		2	1							1			1		1		1											102
	F	1													1															
103. Congestion and haemorrhagic infarct of the lung	M	1																				1								103
	F	5													1				1				1	1	1					
104. Gangrene of the lung	M	1													1															104
105. Asthma	M	3																												105
	F	1										1							1	1	1									
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1																		1										107
	F	3													1					1			1							
107C. Others under this title	M	1																		1										107C
	F	3													1					1			1							

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM,																												
Total		216	85	14	3	2	....	6	4	4	7	3	5	8	9	12	7	8	7	8	10	7	3	3	....	1	....	....	
	M	123	51	7	2	1	....	4	2	4	7	3	3	4	5	10	....	2	2	6	6	3	1	....	....	....	....	....	
	F	93	34	7	1	1	....	2	2	....	....	....	2	4	4	2	7	6	5	2	4	4	2	3	....	1	....	....	
108. Diseases of the mouth and annexa	M	4	....	1	....	....	....	....	....	....	....	1	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	108
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	109
	F	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	
109A, Adenoid vegetations	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	109A
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	
109B. Pharynx and tonsils	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	109B
	F	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	
111. Ulcer of the stomach and duodenum	M	9	....	....	....	....	....	....	....	....	1	....	2	1	....	1	....	1	1	1	....	1	....	....	....	....	....	....	....	111
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
111A. Ulcer of the stomach	M	8	....	....	....	....	....	....	....	....	1	....	1	1	....	1	....	1	1	1	....	1	....	....	....	....	....	....	....	111A
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
111B, Ulcer of the duodenum	M	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	111B
112. Other diseases of the stomach (cancer excepted)	M	11	2	....	....	....	....	....	....	....	....	....	1	....	1	....	....	1	....	2	3	1	....	....	....	....	....	....	....	112
	F	5	1	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	1	....	....	
113. Diarrhoea and enteritis (under 2 years of age)	M	52	46	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	113
	F	38	33	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
114. Diarrhoea and enteritis (2 years or over)	M	2	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	114
	F	5	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	2	....	....	....	1	....	....	....	....	....	....	
117. Appendicitis and typhlitis	M	23	....	....	....	....	....	4	1	4	5	1	....	3	2	3	....	....	....	....	....	....	....	....	....	....	....	....	117
	F	9	....	1	1	....	....	1	2	....	....	....	1	1	....	....	1	1	....	....	....	....	....	....	....	....	....	....	
118, Hernia, intestinal obstruction	M	10	2	....	....	....	....	....	1	....	....	1	....	....	1	1	....	....	....	2	1	....	1	....	....	....	....	....	118
	F	9	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	1	3	....	2	....	....	....	....	
118A. Hernia	M	5	1	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	1	....	....	....	....	....	....	....	118A
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	2	....	....	....	....	
118B, Intestinal obstruction	M	5	1	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	118B
	F	6	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....	3	....	....	....	....	....	....	
119. Other diseases of the intestines	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	1	....	....	....	....	....	119
122, Cirrhosis of the liver	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	122
	F	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	2	1	....	1	....	1	....	....	....	....	....	

122B. Cirrhosis of the liver, not specified as alcoholic	M	3														1				1	1								122B
	F	7															2	2	1		1		1						
123. Biliary calculi	M	1													1				1										123
	F	3														2			1										
124. Other diseases of the liver	M	3														1			1	1									124
	F	4																1	1	1	1								
125. Diseases of the pancreas	M	1														1													125
	F	1											1																
126. Peritonitis without specified cause	M	2			1					1																			126
	F	4					1								1		1		1										
CLASS VII —NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																													
Total		129	3							2	2	5	5	3	8	6	8	7	12	17	18	12	12	7	2				
	M	74	2							2		2		1	4	2	6	4	9	8	12	8	10	4					
	F	55	1								2	3	5	2	4	4	2	3	3	9	6	4	2	3	2				
128. Acute nephritis (including unspecified, under 10 years of age)	M	7	1							1		1			2			1	1										128
	F	6										1	2		1		1								1				
129. Chronic nephritis (Bright's disease)	M	43								1				1	2	2	6	2	6	4	8	4	4	3					129
	F	35									1		1	1	1	2	1	2	3	8	5	4	2	3	1				
131. Other diseases of the kidneys and annexa	M	2																		1	1								131
	F	2	1																	1									
132. Calculi of the urinary passages	M	3																	1	1			1						132
133. Diseases of the bladder	M	1																					1						133
135. Diseases of the prostate	M	17										1						1	1	2	3	4	4	1					135
136. Non-venereal diseases of the male genital organs	M	1	1																										136
137. Cysts and other benign tumours of the ovary	F	3											1	1	1														137
138. Salpingitis and pelvic abscess	F	4										2				1		1											138
139. Benign tumours of the uterus	F	3													1	1					1								139
140. Non-puerperal uterine haemorrhage	F	1									1																		140
141. Other diseases of the female genital organs	F	1											1																141
CLASS VIII —THE PUERPERAL STATE.																													
Total		13								2	4	2	3	2															
145. Other accidents of labour	F	1										1																	145
145C. Other surgical operations and instrumental delivery	F	1										1																	145C
146. Puerperal septicaemia	F	4								1	2		1																146

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	1											1															147
148. Puerperal albuminuria and convulsions	F	6								1	2	1		2														148
149. Following childbirth (not otherwise defined)	F	1											1															149
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																												
Total		7	2						1							1	1					2						
	M	3	1						1													1						
	F	4	1													1	1					1						
151. Gangrene	F	1															1											151
152. Furuncle	F	1	1																									152
153. Acute abscess	M	1																			1							153
	F	2														1					1							
154. Other diseases of the skin and annexa	M	2	1						1																			154
CLASS X —DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																												
Total		7	1		1					1		1				1		1				1						
	M	3								1		1										1						
	F	4	1		1											1		1										
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	3								1		1										1						155
156. Diseases of the joints (tuberculosis and rheumatism excepted)	F	1			1																							156
	F	3	1													1		1										

CLASS XI.—MALFORMATIONS,																														
Total		21	21																											
	M	11	11																											
	F	10	10																											
159, Congenital malformations (still-births not included)	M	11	11																											159
	F	10	10																											
159A, Congenital hydrocephalus	F	1	1																											159A
159B, Congenital malformations of the heart	M	6	6																											159B
	F	3	3																											
159C, Others under this title	M	5	5																											159C
	F	6	6																											
CLASS XII.—DISEASES OF EARLY INFANCY,																														
Total		118	118																											
	M	68	68																											
	F	50	50																											
160. Congenital debility, icterus and sclerema	M	14	14																											160
	F	6	6																											
161, Premature birth, injury at birth	M	50	50																											161
	F	40	40																											
161A. Premature birth	M	40	40																											161A
	F	37	37																											
161B. Injury at birth	M	10	10																											161B
	F	3	3																											
162, Other diseases peculiar to early infancy	M	4	4																											162
	F	4	4																											
162A. Specified diseases	M	4	4																											162A
	F	4	4																											
CLASS XIII —OLD AGE,																														
Total		13																			3	2	3	5						
	M	6																			2			4						
	F	7																			1	2	3	1						
164. Senility	M	6																			2			4						164
	F	7																			1	2	3	1						

TABLE 36—CAUSES OF DEATH BY SEX AND AGE—OTTAWA, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS XIV,—EXTERNAL CAUSES.																												
Total		82	1	1	2	...	....	5	8	7	3	4	5	2	4	1	8	4	9	2	4	6	4	2	....	....	....	....	
	M	56	1	....	1	....	....	3	6	6	3	3	4	1	3	1	5	4	5	1	2	4	1	2	....	....	....	....	
	F	26	...	1	1	....	....	2	2	1	....	1	1	1	1	....	3	....	4	1	2	2	3	....	....	....	....	....	
165-174. Suicides	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....	....	....	....	....	....	....	165-174
166. Suicide by corrosive substances	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	166
169. Suicide by drowning	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	169
171. Suicide by cutting or piercing instruments	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	171
179. Accidental burns and scalds (conflagration excepted)	M	4	....	....	1	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	179
	F	6	....	....	1	....	....	1	1	1	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
180. Accidental mechanical suffocation	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	180
180B. Asphyxia	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	180B
181. Accidental absorption of irrespirable or poisonous gas	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	181
182. Accidental drowning	M	7	....	....	....	....	....	....	2	3	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	182
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
183. Accidental traumatism by firearms	M	2	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	183
185. Accidental traumatism by fall	M	12	....	....	....	....	....	1	2	1	1	1	....	....	....	....	1	....	1	....	1	2	1	....	....	....	....	....	185
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	1	....	....	....	....	....	
187. Accidental traumatism by machines	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	187
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.	M	17	....	....	....	....	....	1	1	2	1	1	2	....	1	....	2	2	2	1	....	....	1	....	....	....	....	....	188
	F	9	....	....	....	....	....	1	1	....	....	1	....	....	1	....	....	....	3	....	1	1	....	....	....	....	....	....	
188A. Railroad accidents	M	2	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	188A
188B. Street car accidents	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	188B
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
188C. Automobile accidents	M	10	....	....	....	....	....	1	1	2	....	1	....	....	1	....	1	....	2	1	....	....	....	....	....	....	....	....	188C
	F	7	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	2	....	1	1	....	....	....	....	....	....	
188E. Injuries by other vehicles	M	3	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	188E
	F	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
188F. Other crushing	M	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	188F
192. Starvation (deprivation of food or water)	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	192
194. Excessive heat	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	194
196. Other accidental electric shocks	M	2	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	196

197-199. Homicides	M	1	1																												197–199
199. Homicide by other means	M	1	1																												199
201. Fracture (cause not specified)	M	1																				1									201
	F	4																				1	1	2							
202, Other external violence (cause specified)	M	4													2			1				1									202
	F	1		1																											
CLASS XV,—ILL-DEFINED DISEASES,																															
Total		11	1								1								1	2	1	3	1	1							
	M	6	1								1								1	1		2									
	F	5																		1	1	1	1	1							204
204. Sudden death	M	1	1																												205
205. Cause of death not specified or ill-defined	M	5									1								1	1		2									205B
	F	5																		1	1	1	1	1							205C
205B. Not specified or unknown	M	1									1																				
205C Heart failure	M	4																	1	1		2									
	F	5																		1	1	1	1	1							

TABLE 37—CAUSES OF DEATH BY SEX AND AGE—LONDON, 1928

CAUSES OF DEATH	Sex	Total	AGES—YEARS																										
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
DEATHS—ALL CAUSES. **Total**....		1122	76	13	9	3	3	16	7	17	25	18	24	24	49	49	67	67	94	134	135	121	93	58	16	4	....	..	
	M	549	49	5	5	2	1	10	3	10	14	9	13	10	26	25	32	33	43	66	68	52	38	25	8	2	....	...	
	F	573	27	8	4	1	2	6	4	7	11	9	11	14	23	24	35	34	51	68	67	69	55	33	8	2	....	...	
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																													
Total.....		148	6	4	4	2	2	6	1	5	10	7	12	4	8	8	9	9	8	11	10	8	12	1	1	....	....	...	
	M	74	5	1	....	2	1	3	....	3	4	4	8	2	3	5	3	5	4	4	8	3	5	....	1	....	...	...	
	F	74	1	3	4	....	1	3	1	2	6	3	4	2	5	3	6	4	4	7	2	5	7	1	....	....	....	...	
7. Measles.....	M	2	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	7
	F	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
8. Scarlet fever.....	F	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	8
9. Whooping-cough.....	M	4	3	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	9
	F	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
10. Diphtheria.....	M	2	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	10
	F	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
11. Influenza.....	M	33	1	....	....	....	....	1	....	....	2	3	1	1	1	2	1	2	2	1	6	3	5	....	1	....	....	....	11
	F	39	1	1	....	....	....	1	....	1	2	1	3	....	3	2	4	2	3	4	1	4	5	1	....	....	....	....	
11A. Influenza, sole cause.....	M	3	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	11A
	F	3	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	
11B. Influenza, with phthisis.....	M	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11B
11D. Influenza, with pneumonia..	M	20	1	....	....	....	....	1	....	....	1	2	....	1	1	1	1	1	....	1	4	2	2	....	1	....	....	....	11D
	F	28	1	....	....	....	....	1	....	....	2	1	2	....	2	1	4	2	2	4	....	3	3	....	....	....	....	....	
11E. Influenza, with other respiratory diseases.....	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	11E
11F. Influenza, with diseases and accidents of pregnancy and parturition.....	F	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	11F
11G. Influenza, with other causes.	M	8	....	....	....	....	....	....	....	....	....	....	1	....	....	1	....	1	1	....	2	1	1	....	....	....	....	....	11G
	F	7	....	....	....	....	....	....	....	1	....	....	....	....	1	1	....	....	1	....	1	1	1	....	....	....	....	....	
21. Erysipelas.....	M	2	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	21
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	
22. Acute anterior poliomyelitis..	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	22
23. Lethargic encephalitis.....	M	4	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	23
	F	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	
24. Meningococcus meningitis....	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	24
25. Other epidemic and endemic diseases.....	F	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	25
25A. Chicken-pox.....	F	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	25A

31-37. Tuberculosis. Total	M	23								2	2	1	6	1	1	3	2	3		1	1										31–37
	F	22		1			1			1	4	2	1	2	2	1	1	1		3	1	1									
31. Tuberculosis of the respiratory system	M	20								1	2	1	5	1	1	3	2	2		1	1										31
	F	17								1	3	2	1	1	2	1	1	1		2	1	1									
32. Tuberculosis of the meninges and central nervous system	F	1					1																								32
33. Tuberculosis of the intestines and peritoneum	M	1																1													33
	F	2									1			1																	
34. Tuberculosis of the vertebral column	M	1								1																					34
	F	1																		1											
35. Tuberculosis of the joints	M	1											1																		35
37. Disseminated tuberculosis	F	1		1																											37
37A. Disseminated tuberculosis, acute	F	1		1																											37A
38. Syphilis	M	2																		1	1										38
	F	1																		1											
41. Purulent infection, septicaemia	M	1													1																41
	F	2						1	1																						
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.																															
Total		191	1	1		1		1	2	1	1		2	5	12	10	19	25	30	26	23	19	5	7							
	M	88	1					1			1		1	1	6	5	9	10	14	14	10	10	1	4							
	F	103		1		1			2	1			1	4	6	5	10	15	16	12	13	9	4	3							
	M	62									1		1	1	4	3	7	6	11	9	7	9		3							43–49
	F	74											1	2	4	4	7	11	12	11	10	8	2	2							
43. Cancer of the buccal cavity	M	5																1	1			2		1							43
	F	1													1																
44. Cancer of the stomach and liver	M	18													1	1	2	3	2	4	2	1		2							44
	F	24												1	3	1		2	2	4	7	3		1							
45. Cancer of the peritoneum, intestines and rectum	M	13													2		1		2	2	2	4									45
	F	14															2	4	4	2	1			1							
46. Cancer of the female genital organs	F	11														1		2	4	2		2									46
47. Cancer of the breast	F	14														2	3	2	2	3		1	1								47
48. Cancer of the skin	F	1																1													48
49. Cancer of other or unspecified organs	M	26									1		1	1	1	2	4	2	6	3	3	2									49
	F	9											1	1			2				2	2	1								
49A. Cancer of eye and ear	F	1											1																		49A
49B. Cancer of circulatory system	M	2											1									1									49B
49C. Cancer of respiratory system	M	3																1		1	1										49C
	F	3												1			1				1										
49D. Cancer of digestive system	M	3															1	1	1												49D
	F	3																				1	1	1							

TABLE 37—CAUSES OF DEATH BY SEX AND AGE—LONDON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
49E. Cancer of genito-urinary organs	M	15									1					2	3		4	2	2	1						49E
	F	1															1											
49F. Cancer of the bones and joints	M	2												1	1													49F
	F	1																			1							
49H. Generalized cancer	M	1																	1									49
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	1																		1								50
	F	1																		1								
51. Acute rheumatic fever	M	3						1										1										51
	F	2								1									1									
52. Chronic rheumatism, osteo-arthritis, gout	M	1																			1							52
	F	2															1		1									
57. Diabetes mellitus	M	9																	1	3	3		1	1				57
	F	9							1					1		1		2	1		1		1	1				
58. Anaemia, chlorosis	M	4														1		1	1	1								58
	F	5													2		1				1	1						
58A. Pernicious anaemia	M	4														1		1	1	1								58A
	F	5													2		1				1	1						
60. Diseases of the thyroid gland	M	2													2													60
	F	6												1				2	1		1		1					
60A. Exophthalmic goiter	M	2													2													60A
	F	4												1				2			1							
60B. Other diseases of the thyroid gland	F	2																	1				1					60B
62. Diseases of the thymus	M	1	1																									62
63. Diseases of the adrenals (Addison's disease)	M	1																1										63
65. Leukaemia, lymphadenoma	M	1																	1									65
	F	2				1			1																			
65A. Leukaemia	M	1																	1									65A
	F	2				1			1																			
66. Alcoholism	M	3															2	1										66
66B. Acute alcoholism	M	2															1	1										66B
66C. Chronic alcoholism	M	1															1											66C
69. Other general diseases	F	2		1													1											69
69D. Others under this title	F	2		1													1											69D

CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE																													
Total	M	85	3	....	1	....	....	3	....	....	3	2	1	2	4	3	7	3	2	11	9	15	10	5	1	....	....	....	
	M	44	3	....	1	....	....	3	....	....	3	1	....	1	2	1	5	2	....	7	3	4	6	1	1	....	....	....	
	F	41	....	....	....	....	....	....	....	....	....	1	1	1	2	2	2	1	2	4	6	11	4	4	....	....	....	....	
70. Encephalitis	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	70
	F	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
70B. Encephalitis	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	70B
	F	2	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
71. Meningitis	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	71
71A. Simple meningitis	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	71A
73. Other diseases of the spinal cord	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	73
	F	6	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	1	....	1	1	....	....	....	....	
74. Cerebral haemorrhage, apoplexy	M	15	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	4	1	2	3	1	1	....	....	....	74
	F	15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	4	8	1	1	....	....	....	....	
74A. Apoplexy	M	6	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	1	....	2	....	1	....	....	....	74A
	F	8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	3	1	....	....	....	....	....	
74B. Cerebral haemorrhage	M	8	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	3	....	1	1	1	....	....	....	....	74B
	F	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	5	....	1	....	....	....	....	
74C. Cerebral thrombosis and embolism	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	74C
75. Paralysis without specified cause	M	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....	....	75
	F	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	2	1	1	....	....	....	....	
75A. Hemiplegia	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	75A
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	....	....	....	
75B. Others under this title	M	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	75B
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	
76. General paralysis of the insane	M	8	....	....	....	....	....	....	....	....	....	....	....	1	1	1	3	....	....	2	....	....	....	....	....	....	....	....	76
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	
77. Other forms of mental alienation	M	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	77
	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
78. Epilepsy	M	4	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....	....	....	78
	F	4	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	1	1	....	....	....	....	....	....	....	
79. Convulsions (non-puerperal, 5 years or over)	M	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	79
80. Infantile convulsions (under 5 years of age)	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	80
82. Neuralgia and neuritis	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	82
84. Other diseases of the nervous system	M	3	....	....	1	....	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	84
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	
86. Diseases of the ear and of the mastoid process	M	3	1	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	86
	F	3	....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
86A. Diseases of the ear	F	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	86A
86B. Diseases of the mastoid process	M	3	1	....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	86B
	F	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	

TABLE 37—CAUSES OF DEATH BY SEX AND AGE—LONDON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.																												
Total		268	....	....	....	....	....	....	1	1	....	....	....	3	4	9	12	11	23	47	48	42	31	28	6	2	....	....	
	M	120	....	....	....	....	....	....	1	1	....	....	....	2	3	5	8	6	9	21	21	18	9	12	2	2	....	....	
	F	148	....	....	....	....	....	....	....	....	....	....	....	1	1	4	4	5	14	26	27	24	22	16	4	....	....	....	
87-90. Diseases of the heart	M	77	....	....	....	....	....	....	1	1	....	....	....	1	1	4	4	4	7	15	12	13	7	5	1	1	....	....	87–90
	F	89	....	....	....	....	....	....	....	....	....	....	....	1	1	4	4	3	9	15	19	12	11	9	1	....	....	....	
88. Endocarditis and myocarditis (acute)	M	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	88
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	
88B. Acute myocarditis	M	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	88B
	F	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	1	....	....	....	....	
89. Angina pectoris	M	15	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	1	6	2	3	....	1	....	....	....	....	89
	F	13	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	1	....	1	7	....	1	1	....	....	....	....	
90. Other diseases of the heart	M	61	....	....	....	....	....	....	1	1	....	....	....	....	....	3	4	4	6	9	10	10	7	4	1	1	....	....	90
	F	73	....	....	....	....	....	....	....	....	....	....	....	1	1	2	3	2	9	14	11	12	10	7	1	....	....	....	
90A. Valvular disease	M	4	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	2	....	....	....	....	....	....	....	90A
	F	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	2	....	1	2	....	....	....	....	....	
90D. Chronic endocarditis	M	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	3	....	....	....	....	....	....	....	90D
	F	12	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	2	3	3	1	1	....	....	....	....	....	
90E. Chronic myocarditis	M	36	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	2	2	2	2	10	6	4	1	1	....	....	90E
	F	40	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	4	7	5	9	6	5	1	....	....	....	
90F. Others under this title	M	17	....	....	....	....	....	....	....	1	....	....	....	....	....	1	....	1	3	7	3	....	1	....	....	....	....	....	90F
	F	14	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1	....	2	2	3	1	1	2	....	....	....	....	
91. Diseases of the arteries	M	40	....	....	....	....	....	....	....	....	....	....	....	1	1	....	3	2	2	6	9	5	2	7	1	1	....	....	91
	F	56	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	5	9	8	11	11	7	3	....	....	....	
91A. Aneurysm	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	91A
91B. Arteriosclerosis	M	40	....	....	....	....	....	....	....	....	....	....	....	1	1	....	3	2	2	6	9	5	2	7	1	1	....	....	91B
	F	55	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	4	9	8	11	11	7	3	....	....	....	
92. Embolism and thrombosis (not cerebral)	M	3	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	92
	F	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	F	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	93
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.																												
Total		96	7	2	2	....	1	3	....	....	1	4	2	3	8	7	4	4	7	9	7	8	7	8	2	....	....	....	
	M	44	4	....	2	....	....	1	....	....	....	2	1	2	4	3	2	4	3	3	2	3	4	2	2	....	....	....	
	F	52	3	2	....	....	1	2	....	....	1	2	1	1	4	4	2	....	4	6	5	5	3	6	....	....	....	....	

98. Diseases of the larynx	F	1						1																							98
98c. Croup	F	1																													98c
99. Bronchitis	M	1						1																							99
	F	1	1																												
99a. Bronchitis, acute	M	1						1																							99a
	F	1	1																												
100. Broncho-pneumonia (including capillary bronchitis)	M	7	1		1								1						1	1	1	1									100
	F	20	1							1					2	1		1	3	5	3	1	2							
100a. Broncho-pneumonia	M	7	1		1							1							1	1	1	1									100a
	F	20	1							1					2	1		1	3	5	3	1	2							
101. Pneumonia	M	32	3		1						1		2	3	2	2	4	3	2	1	2	3	2	1						101
	F	23	1	2		1					1	1	1	3	1	1		3	1		1	2	4							
101a. Pneumonia, lobar	M	18			1						1		1	2	1	2	3	3	2	1	1									101a
	F	13	1								1	1	1	1	1	1		2			1	1	2							
101b. Pneumonia, not otherwise defined	M	14	3										1	1	1		1				1	3	2	1						101b
	F	10		2		1								2				1	1			1	2							
102. Pleurisy	M	2									1			1																102
	F	2						1			1																			
103. Congestion and haemorrhagic infarct of the lung	M	1																						1						103
	F	2													1				1											
105. Asthma	F	2																	1		1									105
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1													1															107
	F	1												1																
107c. Others under this title	M	1													1															107c
	F	1												1																
Class VI.—Diseases of the Digestive System.																															
Total		75	8	4	2			1	1	4	4		2	1	4	3	4	2	8	13	5	5	2	2							
	M	40	4	2	2			1		2	3		1	1	2	1	2	1	5	7	3	1		2						
	F	35	4	2					1	2	1		1		2	2	2	1	3	6	2	4	2							
108. Diseases of the mouth and annexa	M	1																	1											108
109. Diseases of the pharynx and tonsils (including adenoid vegetations	M	2		1	1																									109
109b. Pharynx and tonsils	M	2		1	1																									109b
111. Ulcer of the stomach and duodenum	M	4								2									1	1										111
	F	3							1	1									1											
111a. Ulcer of the stomach	F	2							1										1											111a
111b. Ulcer of the duodenum	M	4								2									1	1										111b
	F	1								1																				
112. Other diseases of the stomach (cancer excepted)	M	3															1	1					1							112
	F	3	1															1			1									
113. Diarrhoea and enteritis (under 2 years of age)	M	5	4	1																										113
	F	4	3	1																										

TABLE 37—CAUSES OF DEATH BY SEX AND AGE—LONDON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																								
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
114. Diarrhoea and enteritis (2 years or over)	M	6			1														2	3								114
	F	4																		2		1	1					
117. Appendicitis and typhlitis	M	8						1		2	1			1	1	1			1									117
	F	7							1	1					2	1	1				1							
118. Hernia, intestinal obstruction	M	7											1		1				1	1	2	1						118
	F	2																		1		1						
118A. Hernia	M	3													1					1		1						118A
	F	1																		1								
118B. Intestinal obstruction	M	4											1						1		2							118B
	F	1																				1						
119. Other diseases of the intestines	F	3															1		2									119
120. Yellow atrophy of the liver	F	1		1																								120
122. Cirrhosis of the liver	M	1																		1								122
122B. Cirrhosis of the liver, not specified as alcoholic	M	1																		1								122B
123. Bilary calculi	M	1																					1					123
	F	1																		1								
124. Other diseases of the liver	M	2															1			1								124
	F	4														1			1		1		1					
126. Peritonitis without specified cause	F	3											1							1	1							126
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																												
Total		120		1						2	2	1	3	5	3	7	8	10	11	12	21	12	15	5	1	1		
	M	57		1						1	2	1		1		3	2	3	5	7	14	8	6	2	1			
	F	63								1			3	4	3	4	6	7	6	5	7	4	9	3		1		
128. Acute nephritis (including unspecified, under 10 years of age)	M	3								1	1									1								128
	F	1																	1									
129. Chronic nephritis (Bright's Disease)	M	42		1							1	1		1		2	2	2	4	5	8	6	6	2	1			129
	F	52											1	2	1	4	6	7	5	4	7	3	8	3		1		
131. Other diseases of the kidneys and annexa	M	1																			1							131
	F	1																										
132. Calculi of the urinary passages	M	1														1							1					132
133. Diseases of the bladder	M	1																		1								133
135. Diseases of the prostate	M	9																1	1	1	4	2						135

37. Cysts and other benign tumours of the ovary	F	3												1							1		1								137
138. Salpingitis and pelvic abscess.	F	1								1																					138
141. Other diseases of the female genital organs	F	5												1	2	2															141
CLASS VIII.—THE PUERPERAL STATE.																															
Total		6								1	2	2		1																	
143. Accidents of pregnancy	F	2								1	1																				143
143A. Abortion	F	2								1	1																				143A
144. Puerperal haemorrhage	F	1													1																144
147. Puerperal phlegmasia, alba dolens, puerperal embolism, sudden death in puerperium	F	2									1	1																			147
149. Following childbirth (not otherwise defined)	F	1										1																			149
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																															
Total		8	1																	1	1	2	2	1						
	M	4																			1	2	1							
	F	4	1																	1			1	1						
151. Gangrene	M	2																				2									151
	F	2																		1			1								
153. Acute abscess	M	1																			1										153
	F	1																						1							
154. Other diseases of the skin and annexa	M	1																					1								154
	F	1	1																												
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																															
Total		2						1														1									
	F	2						1														1									
155. Diseases of the bones (mastoid and tuberculosis excepted)	F	2						1														1									155
CLASS XI.—MALFORMATIONS.																															
Total		15	13	1														1													
	M	9	8	1																											
	F	6	5															1													
159. Congenital malformations (still-births not included)	M	9	8	1																											159
	F	6	5															1													

TABLE 37—CAUSES OF DEATH BY SEX AND AGE—LONDON, 1928—Continued

CAUSES OF DEATH	Sex	Total	AGES—YEARS																									
			Under 1	1	2	3	4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 to 94	95 to 99	100 and over	Not stated	
159B. Congenital malformations of the heart	M	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	159B
	F	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
159C. Others under this title	M	5	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	159C
	F	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	
CLASS XII.—DISEASES OF EARLY INFANCY.																												
Total		37	37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	M	24	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
	F	13	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
160. Congenital debility, icterus and sclerema	M	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160
161. Premature birth, injury at birth	M	22	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	161
	F	11	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
161A. Premature birth	M	19	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	161A
	F	10	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
161B. Injury at birth	M	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	161B
	F	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
162. Other diseases peculiar to early infancy	M	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	162
	F	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
162A. Specified diseases	M	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	162A
	F	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
CLASS XIII.—OLD AGE.																												
Total		8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	4	..	1	1	..	..	
	M	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	
	F	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	..	..	
164. Senility	M	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	164
	F	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	1	1	..	..	

CLASS XIV.—EXTERNAL CAUSES.																														
Total		60						1	2	3	2	2	2		6	2	3	3	4	4	7	8	5	2	4					
	M	39						1	2	3	1	1	2		6	2	1	2	3	2	3	4	3	2	1					
	F	21									1	1					2	1	1	2	4	4	2		3					
165-174. Suicides	M	4											1		1				1			1								165–174
	F	3										1					1		1											
166. Suicide by corrosive substances	F	1															1													166
167. Suicide by poisonous gas	M	1											1																	167
168. Suicide by hanging or strangulation	M	1																				1								168
170. Suicide by firearms	M	2													1				1											170
171. Suicide by cutting or piercing instruments	F	1																	1											171
173. Suicide by crushing	F	1										1																		173
179. Accidental burns and scalds (conflagration excepted)	M	2							1												1									179
181. Accidental absorption of irrespirable gas	M	1																							1					181
182. Accidental drowning	M	2						1			1																			182
185. Accidental traumatism by fall	M	7								1					2	1			1	1	1									185
	F	4															1		1		2									
187. Accidental traumatism by machines	M	2								1								1												187
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	16							1	1		1	1		3	1	1	1	2	1		1	2							188
	F	4									1							1		1	1									
188A. Railroad accidents	M	5								1			1		2								1							188A
188B. Street car accidents	M	1																		1										188B
188C. Automobile accidents	M	9							1			1			1	1	1	1	1			1	1							188C
	F	4									1							1		1	1									
188E. Injuries by other vehicles	M	1																	1											188E
201. Fracture (cause not specified)	M	5																			1	1	1	2						201
	F	10																			3	2	2		3					
CLASS XV.—ILL-DEFINED DISEASES.																														
Total		3																			2		1							
	M	3																			2		1							
205. Cause of death not specified or ill-defined	M	3																			2		1							205
205C. Heart failure	M	3																			2		1							205C

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
DEATHS—ALL CAUSES. Total		**37,128**	**7,315**	**1,337**	**1,158**	**1,295**	**1,869**	**51**	**305**	**2,977**	**5,501**	**6,340**	**7**	**8,973**	.....
	M	**19,457**	**4,055**	**825**	**750**	**763**	**927**	**40**	**57**	**1,330**	**3,076**	**4,248**	**5**	**3,381**	.....
	F	**17,671**	**3,260**	**512**	**408**	**532**	**942**	**11**	**248**	**1,647**	**2,425**	**2,092**	**2**	**5,592**	.....
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.															
Total		4,738	1,185	461	354	151	133	7	102	709	604	415	.....	617	.....
	M	2,351	601	227	214	89	47	2	17	307	364	260	.....	223	.....
	F	2,387	584	234	140	62	86	5	85	402	240	155	.....	394	.....
1. Typhoid and paratyphoid fever	M	54	3	13	9	1	.....	.....	1	11	10	5	.....	1	.....
	F	24	4	4	3	.....	.....	.....	1	8	1	.....	.....	3	.....
1A. Typhoid fever	M	52	3	11	9	1	.....	.....	1	11	10	5	.....	1	.....
	F	24	4	4	3	.....	.....	.....	1	8	1	.....	.....	3	.....
1B. Paratyphoid fever	M	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4. Undulant fever	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
5. Malaria	M	3	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
6. Small-pox	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7. Measles	M	36	32	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
	F	26	24	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
8. Scarlet fever	M	23	21	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	44	32	2	.....	.....	.....	.....	5	5	.....	.....	.....	.....	.....
9. Whooping-cough	M	78	78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	97	96	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
10. Diphtheria	M	116	110	2	.....	.....	.....	.....	1	2	1	.....	.....	.....	.....
	F	97	86	4	.....	.....	.....	1	.....	3	2	.....	.....	1	.....
11. Influenza	M	801	179	29	27	24	24	.....	4	80	112	173	.....	149	.....
	F	910	131	32	22	21	66	.....	11	109	99	118	.....	301	.....
11A. Influenza, sole cause	M	84	20	2	1	1	4	.....	.....	5	3	21	.....	27	.....
	F	127	37	4	.....	3	11	.....	.....	4	5	13	.....	50	.....
11B. Influenza, with phthisis	M	10	1	1	1	1	1	.....	.....	2	2	1	.....	.....	.....
	F	7	.....	1	1	.....	.....	.....	.....	3	1	.....	.....	1	.....
11C. Influenza, with bronchitis	M	31	7	.....	2	1	2	.....	.....	4	2	6	.....	7	.....
	F	33	1	.....	.....	.....	5	.....	.....	2	3	6	.....	16	.....
11D. Influenza, with pneumonia	M	436	113	20	20	11	8	.....	2	46	71	79	.....	66	.....
	F	435	57	19	12	12	32	.....	6	58	58	44	.....	137	.....
11E. Influenza, with other respiratory diseases	M	17	3	1	1	.....	2	.....	.....	1	2	4	.....	3	.....
	F	15	4	.....	2	.....	2	.....	.....	1	2	2	.....	2	.....
11F. Influenza, with diseases and accidents of pregnancy and parturition	F	21	.....	1	.....	.....	.....	.....	4	15	.....	.....	.....	1	.....
11G. Influenza, with other causes	M	223	35	5	2	10	7	.....	2	22	32	62	.....	46	.....
	F	272	32	7	7	6	16	.....	1	26	30	53	.....	94	.....
12. Miliary fever	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
13. Mumps	M	8	4	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....
	F	9	5	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
16. Dysentery	M	21	11	.....	.....	.....	.....	.....	.....	1	2	4	.....	3	.....
	F	10	4	.....	.....	.....	.....	.....	.....	1	1	1	.....	3	.....
21. Erysipelas	M	51	14	.....	1	2	1	.....	.....	4	8	11	.....	10	.....
	F	48	14	.....	1	1	6	.....	.....	6	6	5	.....	9	.....
22. Acute anterior poliomyelitis	M	16	11	4	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	18	14	1	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....
23. Lethargic encephalitis	M	32	5	6	3	.....	1	.....	.....	1	10	3	.....	3	.....
	F	18	4	2	1	1	.....	.....	1	2	6	1	.....	.....	.....
24. Meningococcus meningitis	M	31	19	4	2	.....	.....	.....	.....	4	2	.....	.....	.....	.....
	F	15	11	1	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
25. Other epidemic and endemic diseases	M	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	7	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25A. Chicken-pox	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25B. German measles	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25C. Others under this title	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29. Tetanus	M	9	5	1	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....
	F	8	6	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
30. Mycoses	M	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	3	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
31-37. Tuberculosis. Total	M	888	74	149	163	47	14	2	11	181	164	38	.....	45	.....
	F	944	111	182	103	38	12	3	63	244	100	26	.....	62	.....

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
27,280	**7,014**	**955**	**1,532**	**347**	**3,138**	**3,093**	**3,343**	**3,149**	**3,352**	**3,038**	**2,763**	**2,656**	**2,744**	**3,016**	**2,867**	**3,969**	
14,078	**3,651**	**493**	**986**	**249**	**1,606**	**1,664**	**1,725**	**1,716**	**1,748**	**1,569**	**1,455**	**1,432**	**1,452**	**1,615**	**1,502**	**1,973**	
13,202	**3,363**	**462**	**546**	**98**	**1,532**	**1,429**	**1,618**	**1,433**	**1,604**	**1,469**	**1,308**	**1,224**	**1,292**	**1,401**	**1,365**	**1,996**	
3,530	828	97	250	33	359	328	393	411	505	403	295	268	261	304	269	942	
1,706	415	52	157	21	172	176	174	223	239	201	157	136	131	159	146	437	
1,824	413	45	93	12	187	152	219	188	266	202	138	132	130	145	123	505	
44	6	2	2	.....	5	4	1	4	1	4	8	5	10	3	7	2	1
17	5	.....	2	.....	.....	1	2	4	1	1	3	3	1	3	1	4	
42	6	2	2	.....	5	4	1	4	1	4	7	5	10	3	6	2	1A
17	5	.....	2	.....	.....	1	2	4	1	1	3	3	1	3	1	4	
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	1B
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4
2	1	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	5
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	
.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	6
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
36	.....	.....	.....	.....	1	1	8	2	4	3	2	2	2	1	.....	10	7
25	.....	.....	1	.....	3	2	5	4	3	3	1	3	.....	.....	1	1	
23	.....	.....	.....	.....	2	1	2	2	2	1	1	.....	1	4	3	4	8
42	2	.....	.....	.....	3	7	6	6	3	3	1	.....	.....	4	3	8	
75	1	.....	1	1	5	6	2	4	11	8	11	5	12	6	6	2	9
97	.....	.....	.....	.....	10	4	9	9	10	9	7	5	6	9	2	17	
106	9	.....	.....	1	11	11	10	3	13	7	8	10	7	12	7	17	10
91	3	3	.....	.....	16	5	11	5	9	6	7	6	4	8	8	12	
579	166	21	34	1	46	53	45	71	74	74	27	19	20	30	38	304	11
643	215	21	27	4	45	59	67	63	96	82	25	19	19	28	29	378	
59	19	2	4	.....	6	6	9	4	6	12	4	1	3	4	4	25	11A
101	24	1	.....	1	6	8	13	14	7	13	4	2	5	.....	4	51	
7	2	.....	1	.....	.....	1	.....	.....	1	1	3	1	1	.....	.....	2	11B
4	3	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	4	
19	12	.....	.....	.....	2	5	.....	2	.....	3	.....	1	1	2	2	13	11C
22	8	1	1	1	1	.....	2	3	3	6	.....	1	2	3	.....	12	
312	86	15	22	1	21	24	18	45	49	42	12	7	5	13	16	184	11D
291	118	10	15	1	18	27	30	21	50	33	11	6	5	13	12	209	
14	1	1	1	.....	.....	.....	1	.....	1	3	2	3	1	.....	1	5	11E
12	2	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....	1	11	
17	3	.....	1	.....	2	1	2	1	2	5	.....	1	.....	1	.....	6	11F
168	46	3	6	.....	17	17	17	20	17	13	6	6	9	11	15	75	11G
196	57	8	10	1	18	22	20	24	33	23	10	9	6	10	12	85	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	12
7	1	.....	.....	.....	1	.....	2	4	.....	1	.....	.....	.....	.....	.....	.....	13
9	.....	.....	.....	.....	1	.....	1	1	2	.....	1	.....	1	1	1	.....	
16	3	.....	2	.....	.....	1	1	1	.....	1	2	2	4	4	3	2	16
9	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	5	2	.....	1	
35	13	2	1	.....	5	1	7	9	7	7	3	.....	1	3	3	5	21
39	6	.....	3	.....	7	4	6	7	6	4	2	1	4	1	4	2	
15	.....	.....	1	.....	.....	3	2	1	1	1	2	1	2	2	1	.....	22
17	1	.....	.....	.....	.....	1	1	1	2	1	2	1	1	2	3	3	
22	4	.....	6	.....	2	4	1	4	2	2	2	2	5	2	4	2	23
15	2	.....	1	.....	1	3	.....	2	4	1	2	2	.....	1	1	1	
25	3	.....	3	.....	3	1	.....	6	3	2	3	3	.....	2	4	4	24
13	2	.....	.....	.....	2	.....	2	1	3	3	2	1	1	.....	.....	.....	
4	.....	.....	.....	.....	1	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	25
7	.....	.....	.....	.....	1	3	.....	.....	1	1	.....	.....	.....	.....	.....	1	
2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	25A
5	.....	.....	.....	.....	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	25B
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	25C
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
7	1	.....	1	.....	.....	.....	.....	.....	.....	2	2	.....	.....	1	1	3	29
7	1	.....	.....	.....	.....	.....	.....	.....	1	.....	3	2	1	1	.....	.....	
1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	30
2	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	
594	167	21	92	14	77	71	72	91	98	71	73	74	56	79	52	74	31–37
715	150	20	51	8	87	57	102	78	113	79	70	82	72	73	60	71	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
31. Tuberculosis of the respiratory system	M	753	25	125	152	41	10	2	10	167	144	36	.....	41	.....
	F	776	52	152	89	28	11	3	60	223	77	24	.....	57	.....
32. Tuberculosis of the meninges and central nervous system	M	36	26	5	1	1	1	.....	.....	2	.....	.....	.....	.....	.....
	F	47	35	5	1	.....	.....	.....	.....	5	1	.....	.....	.....	.....
33. Tuberculosis of the intestines and peritoneum	M	24	6	5	2	2	3	.....	.....	1	4	.....	.....	1	.....
	F	47	8	11	4	6	.....	.....	2	7	8	.....	.....	1	.....
34. Tuberculosis of the vertebral column	M	22	5	3	3	.....	.....	.....	.....	4	6	1	.....	.....	.....
	F	10	2	.....	1	2	.....	.....	.....	1	1	1	.....	2	.....
35. Tuberculosis of the joints	M	10	2	2	1	2	.....	.....	.....	2	1	.....	.....	.....	.....
	F	6	1	2	.....	1	.....	.....	.....	.....	2	.....	.....	.....	.....
36. Tuberculosis of other organs	M	17	2	4	2	.....	.....	.....	.....	3	2	1	.....	3	.....
	F	24	2	5	3	1	1	.....	.....	6	5	1	.....	.....	.....
36A. Tuberculosis of the skin and sub-cutaneous cellular tissue	F	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
36B. Tuberculosis of the bones (vertebral column excepted)	M	3	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
36C. Tuberculosis of the lymphatic system (mesenteric, and retroperitoneal glands excepted)	M	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	5	1	1	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....
36D. Tuberculosis of the genito-urinary system	M	11	.....	2	2	.....	.....	.....	.....	3	1	1	.....	2	.....
	F	13	1	3	2	.....	.....	.....	.....	4	3	.....	.....	.....	.....
36E. Tuberculosis of organs other than above	F	2	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
37. Disseminated tuberculosis	M	26	8	5	2	1	.....	.....	1	2	7	.....	.....	.....	.....
	F	34	11	7	5	.....	.....	.....	1	2	6	.....	.....	2	.....
37A. Disseminated tuberculosis, acute	M	16	6	2	1	1	.....	.....	.....	1	5	.....	.....	.....	.....
	F	19	7	5	2	.....	.....	.....	1	.....	4	.....	.....	.....	.....
37B. Disseminatedtuberculosis, chronic or unstated	M	10	2	3	1	.....	.....	.....	1	1	2	.....	.....	.....	.....
	F	15	4	2	3	.....	.....	.....	.....	2	2	.....	.....	2	.....
38. Syphilis	M	83	17	3	5	9	4	.....	.....	9	30	3	.....	3	.....
	F	38	9	.....	3	.....	.....	.....	1	11	9	.....	.....	5	.....
40. Gonococcus infection	M	3	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	5	1	1	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
41. Purulent infection, septicaemia	M	90	13	10	3	4	3	.....	.....	10	22	19	.....	6	.....
	F	63	23	5	5	1	1	.....	3	6	6	4	.....	9	.....
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.															
Total	M	5,094	267	96	97	277	258	2	15	393	1,405	1,047	1	1,236	.....
	M	2,315	146	57	49	131	114	2	3	136	627	650	.....	400	.....
	F	2,779	121	39	48	146	144	.....	12	257	778	397	1	836	.....
43-49. Cancer	M	1,571	7	13	24	91	90	1	1	73	459	499	.....	313	.....
	F	1,870	20	12	28	106	113	.....	.....	141	555	276	1	618	.....
43. Cancer of the buccal cavity	M	108	1	.....	1	8	11	.....	.....	4	29	27	.....	27	.....
	F	24	.....	.....	.....	.....	2	.....	.....	.....	4	4	.....	14	.....
44. Cancer of the stomach and liver	M	644	1	.....	9	42	43	1	.....	20	186	200	.....	142	.....
	F	561	3	.....	3	22	43	.....	.....	30	139	106	.....	215	.....
45. Cancer of the peritoneum, intestines and rectum	M	284	.....	1	2	14	13	.....	.....	23	88	97	.....	46	.....
	F	321	1	2	6	21	22	.....	.....	17	89	54	.....	109	.....
46. Cancer of the female genital organs	F	337	.....	1	8	21	8	.....	.....	46	126	32	1	94	.....
47. Cancer of the breast	M	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	F	342	.....	1	4	29	20	.....	.....	30	123	43	.....	92	.....
48. Cancer of the skin	M	43	.....	.....	.....	2	5	.....	.....	1	6	19	.....	10	.....
	F	29	1	.....	2	.....	2	.....	.....	2	6	4	.....	12	.....
49. Cancer of other or unspecified organs	M	490	5	12	12	25	18	.....	1	25	148	156	.....	88	.....
	F	256	15	8	5	13	16	.....	.....	16	68	33	.....	82	.....

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
482	154	18	86	13	65	57	66	68	85	55	70	65	47	63	44	68	31
575	135	17	42	7	69	48	79	64	92	62	61	69	63	59	47	63	
30	5	.....	1	.....	4	4	.....	9	4	4	.....	.....	2	6	2	1	32
39	2	1	4	1	3	5	7	6	8	5	1	2	2	4	1	3	
21	2	1	.....	.....	1	2	2	3	2	4	1	3	2	2	1	1	33
37	7	.....	3	.....	5	.....	6	3	4	6	5	6	1	3	8	.....	
16	3	2	.....	1	.....	4	3	6	1	2	1	2	.....	2	.....	1	34
7	1	1	1	.....	.....	1	4	.....	1	.....	.....	1	1	.....	1	1	
10	.....	.....	.....	.....	1	1	.....	1	.....	1	.....	2	.....	1	2	1	35
5	.....	1	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	1	1	.....	
14	1	.....	2	.....	3	.....	1	2	1	3	.....	1	2	1	1	2	36
21	2	.....	1	.....	4	1	2	2	2	1	.....	3	3	3	1	2	
1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	36A
3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	36B
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	36C
5	.....	.....	.....	.....	1	1	.....	1	.....	.....	.....	1	.....	.....	.....	1	
8	1	.....	2	.....	3	.....	.....	2	1	1	.....	1	1	1	.....	1	36D
11	1	.....	1	.....	2	.....	1	1	1	.....	.....	2	3	2	1	.....	
2	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	36E
21	2	.....	2	.....	3	3	.....	2	5	2	1	1	3	4	2	.....	37
31	3	.....	.....	.....	5	1	4	3	6	4	3	1	1	3	1	2	
14	1	.....	1	.....	2	2	.....	1	.....	2	1	1	2	3	2	.....	37A
16	3	.....	.....	.....	1	1	2	3	1	3	2	.....	1	3	1	1	
7	1	.....	2	.....	1	1	.....	1	5	.....	.....	.....	1	1	.....	.....	37B
15	.....	.....	.....	.....	4	.....	2	.....	5	1	1	1	.....	.....	.....	1	
47	20	4	9	3	7	7	9	16	10	3	4	5	4	6	7	5	38
22	12	.....	4	.....	4	2	2	2	7	2	4	1	5	5	3	1	
2	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	40
4	1	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1	1	.....	.....	
65	18	2	5	.....	3	11	12	5	12	12	6	8	6	4	8	3	41
49	10	.....	4	.....	5	4	5	4	4	6	6	4	8	5	7	5	
3,571	1,150	138	209	26	448	413	438	415	451	431	426	407	393	451	391	430	
1,589	534	59	117	16	205	191	206	197	199	195	184	182	169	211	168	208	
1,982	616	79	92	10	243	222	232	218	252	236	242	225	224	240	223	222	
1,018	426	37	83	7	137	122	137	132	127	130	116	138	121	154	121	136	43–49
1,284	457	56	66	7	165	145	157	141	154	161	173	144	155	161	159	155	
75	26	2	5	.....	11	8	10	9	10	13	13	7	3	15	5	4	43
15	6	1	1	1	1	4	3	2	1	1	2	1	2	2	3	2	
424	165	17	35	3	58	50	49	54	53	48	42	59	51	70	47	63	44
385	138	11	24	3	54	48	47	41	45	50	49	42	51	45	45	44	
189	73	5	16	1	23	26	27	25	17	23	22	29	23	20	25	24	45
226	75	9	10	1	28	33	27	21	26	27	27	27	22	35	22	26	
219	90	14	14	.....	29	24	33	22	29	28	28	28	33	20	33	30	46
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	47
240	84	11	6	1	30	22	21	38	28	28	30	27	27	31	31	29	
29	11	.....	3	.....	5	3	9	3	6	2	2	1	2	1	3	6	48
17	10	1	1	.....	3	1	5	.....	5	3	4	2	1	5	.....	.....	
299	151	13	24	3	40	35	42	41	41	44	37	41	42	47	41	39	49
182	54	9	10	1	20	13	21	17	20	24	33	17	19	23	25	24	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION.

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION											
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
49A. Cancer of eye and ear	M	1										1			
	F	9			1					2	1			5	
49B. Cancer of circulatory system	M	39	1	2	2	1	3		1	6	9	8		6	
	F	33	3	1		2	4			1	9	5		8	
49C. Cancer of respiratory system	M	71		2	1	8	1			5	34	14		6	
	F	45	1	1	1	3	4			6	14	4		11	
49D. Cancer of digestive system	M	58		1	2	3				3	22	18		9	
	F	59				3	3			2	16	9		26	
49E. Cancer of genito-urinary organs	M	239		1	5	7	10			6	65	95		50	
	F	44	8		1	1	3			1	8	5		17	
49F. Cancer of bones and joints	M	24	3	2	1	2	1			2	2	5		6	
	F	20	2	4		1					5	3		5	
49G. Cancer of other specified organs	M	50	1	4	1	3	3			3	14	13		8	
	F	26	1	2	1	2	1			2	7	4		6	
49H. Generalized cancer	M	4				1					1	1		1	
	F	11			1	1				2	5	1		1	
49I. Cancer unspecified	M	4									1	1		2	
	F	9					1				3	2		3	
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	23	2			1				2	5	7		6	
	F	23	1		1	2	2			2	4	2		11	
51. Acute rheumatic fever	M	56	18	9	1	4	1		1	6	8	3		5	
	F	67	19	10	3	3			4	11	8	4		5	
52. Chronic rheumatism, osteoarthritis, gout	M	13		1		1					3	4		4	
	F	22					2				4	3		13	
53. Scurvy	M	4	4												
54. Pellagra	M	1		1											
	F	2								2					
56. Rickets	M	31	31												
	F	20	20												
57. Diabetes mellitus	M	180	14	11	10	3	9			8	48	45		32	
	F	259	8	3	4	8	8			19	68	54		87	
58. Anaemia, chlorosis	M	164	4	5	1	13	11	1		6	36	67		20	
	F	177	3	4	1	10	11		2	22	47	32		45	
58A. Pernicious anaemia	M	150	1	3		12	10	1		5	33	65		20	
	F	157	1	3	1	9	10		2	20	41	31		39	
58B. Other anaemias and chlorosis	M	14	3	2	1	1	1			1	3	2			
	F	20	2	1		1	1			2	6	1		6	
59. Diseases of the pituitary gland	M	2		1	1										
	F	1									1				
60. Diseases of the thyroid gland	M	49	2	4	3	3			1	5	19	7		5	
	F	231		8	8	14	6		3	45	78	21		48	
60A. Exophthalmic goiter	M	26		2	1	2				4	11	4		2	
	F	145		6	3	6	4		3	27	55	14		27	
60B. Other diseases of the thyroid gland	M	23	2	2	2	1			1	1	8	3		3	
	F	86		2	5	8	2			18	23	7		21	
61. Diseases of the parathyroid glands	M	7	7												
	F	6	5									1			
62. Diseases of the thymus	M	37	37												
	F	24	23	1											
63. Diseases of the adrenals Addison's disease	M	7								1	5	1			
	F	3								2	1				
64. Diseases of the spleen	M	9	1	1		1				3	2	1			
	F	6	2				1			2	1				
65. Leukaemia,lymphadenoma	M	58	5	8		1				14	18	7		5	
	F	35	9		2	3			1	7	6	4		3	
65A. Leukaemia	M	33	5	4						8	8	4		4	
	F	25	9		1	2			1	3	5	1		3	
65B. Lymphadenoma (Hodgkin's disease)	M	25		4		1				6	10	3		1	
	F	10			1	1				4	1	3			
66. Alcoholism	M	67		2	9	12	2			14	18	4		6	
	F	6								1	3			2	
66A. Delirium tremens	M	6				2	1				2			1	
	F	1									1				

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1													1				49A
7	2				1	1	1	1	2	1		1				1	
26	7	1	4	1	2	5	4	3	1	4	3	1	4	4	4	4	49B
27	4	1	1		2	1	5		4	3	5	3	2	3	2	3	
29	36	1	4	1	6	5	3	11	5	4	2	7	10	6	6	6	49C
29	10	4	2		4	4	4	5	5	4	4	1	3	2	2	7	
37	18	2	1		7	3	4	9	8	3	3	6	1	5	3	6	49D
41	12	1	4	1	5	2	3	4	4	8	11	3	6	3	5	5	
148	73	7	10	1	15	16	21	12	21	28	24	19	18	29	20	16	49E-
35	7	1	1		5	1	3	2	2	2	7	2	4	5	8	3	
18	5	1			3	3	3	3	3		1	2	2	1	1	2	49F
11	7	1	1			1	1		1	2	2	4	2	1	2	4	
35	9	1	5		5	2	7	3	2	4	3	5	5	2	7	5	49G
16	9	1			1	2	2	3	2	3	3	1	2	3	3	1	
3	1				2					1		1					49H
8	2		1			1	2	2			1	2		1	2		
2	2					1			1		1		1				49I
8	1				2					1				5	1		
18	4		1		4		2		4	4	1	1			1	6	50
14	8		1		2	4	2	1	4		1	1	1	3	3	1	
39	13	2	2		2	4	9	4	6	6	6	3	3	2	4	7	51
52	10	1	4		9	5	6	8	8	3	4	7	2	5	6	4	
11	2					1		2	1		1		1		3	4	52
16	5		1		1	2	2		2	2	5	1	3	4			
4						1	1		1						1		53
1																1	54
1	1								1				1				
31					5	6	2	2	2		2	4	2	3	1	2	56
20					2	1	1	2	1	2	1	2	2	1	2	3	
135	26	11	8		17	25	16	15	11	18	10	13	16	12	8	19	57
182	55	5	15	2	16	21	26	21	26	19	19	22	25	20	15	29	
123	27	5	6	3	19	18	12	19	15	12	24	9	9	11	4	12	58
133	35	8		1	20	22	16	17	24	11	14	10	13	15	10	5	
111	25	5	6	3	17	16	12	18	13	11	24	9	7	8	3	12	58A
120	29	7		1	18	19	16	13	20	11	11	9	12	14	9	5	
12	2				2	2		1	2	1			2	3	1		58B
13	6	1			2	3		4	4		3	1	1	1	1		
1	1						1							1			59
1													1				
41	3		3	2	2	4	3	3	3	7	7	3	5	7	2	3	60
187	35	5	4		18	10	16	18	28	29	17	26	13	25	22	9	
24	2				1	1	1		2	3	6	2	3	5		2	60A
114	25	4	2		10	7	7	11	22	17	12	15	8	19	11	6	
17	1		3	2	1	3	2	3	1	4	1	1	2	2	2	1	60B
73	10	1	2		8	3	9	7	6	12	5	11	5	6	11	3	
7						1	2	2							1	1	61
6					1					1	1	1	1		1		
37					4	1	4	4	5	4	1	2		2	2	8	62
24					3	2	3		1	4	2	2		1	1	5	
5			2				1	1	1		2			1	1		63
1	1	1				2						1					
5	1		3			1			4	2	1			1			64
6						2			1			2				1	
40	12	2	3	1	2	3	6	5	9	6	4	3	4	7	6	3	65
30	3	1	1		2	2	2	5		1	3	3	5	5	2	5	
25	3	2	2	1		2	4	4	6	2	2	3	2	6	2		65A
22	1	1	1		2	1	1	4		1	3	2	4	3	1	3	
15	9		1		2	1	2	1	3	4	2		2	1	4	3	65B
8	2					1	1	1				1	1	2	1	2	
43	16	1	5	2	11	3	4	2	4	5	8	3	7	7	9	4	66
3	3				1				1		1	1	1		1		
3		1		2				1			1		1	1	1	1	66A
	1												1				

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
66B. Acute alcoholism	M	49	.....	2	8	6	1	.....	.....	12	11	4	.....	5	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	2	.....
66C. Chronic alcoholism	M	12	.....	.....	1	4	.....	.....	.....	2	5	.....	.....	.....	.....
67. Chronic poisoning by mineral substances	M	4	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	2	.....
67A. Chronic lead poisoning	M	3	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....
67B. Others under this title	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
68. Chronic organic poisoning	M	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	1	.....
68A. Chronic morphinism	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
68C. Other organic poisoning	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	.....
69. Other general diseases	M	30	14	1	.....	1	1	.....	.....	4	3	4	.....	2	.....
	F	22	11	1	1	.....	1	.....	2	2	1	.....	.....	3	.....
69A. Diabetes insipidus	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
69B. Haemophilia	M	11	8	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....
	F	9	5	1	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....
69C. Purpura haemorrhagica	M	8	4	1	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....
	F	6	3	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	.....
69D. Others under this title	M	10	2	.....	.....	1	.....	.....	.....	2	2	3	.....	.....	.....
	F	6	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.															
Total		2,844	344	78	97	126	178	2	5	146	411	616	.....	841	.....
	M	1,421	184	41	55	68	96	1	.....	68	213	389	.....	306	.....
	F	1,423	160	37	42	58	82	1	5	78	198	227	.....	535	.....
70. Encephalitis	M	37	11	4	3	2	.....	.....	.....	3	7	5	.....	2	.....
	F	29	10	.....	1	.....	.....	.....	.....	8	5	1	.....	4	.....
70A. Abscess of brain	M	10	3	3	1	.....	.....	.....	.....	1	.....	1	.....	1	.....
	F	6	3	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....
70B. Encephalitis	M	27	8	1	2	2	.....	.....	.....	2	7	4	.....	1	.....
	F	23	7	.....	1	.....	.....	.....	.....	6	4	1	.....	4	.....
71. Meningitis	M	59	40	5	2	1	1	.....	.....	2	5	2	.....	1	.....
	F	56	40	3	.....	.....	.....	.....	2	4	2	1	.....	4	.....
71A. Simple meningitis	M	57	39	5	2	1	1	.....	.....	2	5	1	.....	1	.....
	F	56	40	3	.....	.....	.....	.....	2	4	2	1	.....	4	.....
71B. Non-epidemic, cerebro-spinal meningitis	M	2	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
72. Tabes dorsalis (locomotor ataxia)	M	25	.....	.....	1	2	.....	.....	.....	1	11	4	.....	6	.....
	F	4	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	2	.....
73. Other diseases of the spinal cord	M	113	3	5	3	3	5	.....	.....	8	25	43	.....	18	.....
	F	83	4	.....	3	5	5	.....	.....	6	12	17	.....	31	.....
74. Cerebral haemorrhage, apoplexy	M	658	5	5	7	21	62	1	.....	18	87	241	.....	211	.....
	F	737	1	1	7	26	58	.....	.....	23	114	143	.....	364	.....
74A. Apoplexy	M	301	.....	.....	2	8	31	.....	.....	7	36	116	.....	101	.....
	F	346	.....	1	2	8	26	.....	.....	4	46	75	.....	184	.....
74B. Cerebral haemorrhage	M	310	5	3	4	11	28	1	.....	10	41	111	.....	96	.....
	F	345	1	.....	4	15	29	.....	.....	15	61	61	.....	159	.....
74C. Cerebral thrombosis and embolism	M	47	.....	2	1	2	3	.....	.....	1	10	14	.....	14	.....
	F	46	.....	.....	1	3	3	.....	.....	4	7	7	.....	21	.....
75. Paralysis without specified cause	M	101	.....	1	3	3	4	.....	.....	1	15	44	.....	30	.....
	F	139	.....	1	1	7	6	.....	.....	4	13	33	.....	74	.....
75A. Hemiplegia	M	63	.....	.....	1	1	3	.....	.....	.....	9	28	.....	21	.....
	F	88	.....	.....	.....	6	6	.....	.....	2	10	20	.....	44	.....
75B. Others under this title	M	38	.....	1	2	2	1	.....	.....	1	6	16	.....	9	.....
	F	51	.....	1	1	1	.....	.....	.....	2	3	13	.....	30	.....
76. General paralysis of the insane	M	44	.....	.....	2	5	1	.....	.....	8	16	6	.....	6	.....
	F	12	.....	.....	1	2	2	.....	.....	1	1	2	.....	3	.....
77. Other forms of mental alienation	M	29	.....	.....	6	7	5	.....	.....	.....	5	1	.....	5	.....
	F	53	1	3	6	6	4	1	.....	5	16	5	.....	6	.....
78. Epilepsy	M	82	10	8	21	9	6	.....	.....	2	7	13	.....	6	.....
	F	81	9	15	18	7	3	.....	.....	11	8	2	.....	8	.....
79. Convulsions (non-puerperal—5 years or over)	M	3	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
31	13	.....	5	.....	9	2	3	1	4	5	6	3	3	5	6	2	66B
3	2	.....	.....	.....	1	.....	.....	.....	1	.....	1	1	.....	.....	1	.....	
9	3	.....	.....	.....	2	1	1	.....	.....	.....	1	.....	3	1	2	1	66C
1	1	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	1	1	1	67
1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	67A
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	67B
2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	68
3	.....	2	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	1	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	68A
2	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	68C
1	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	1	
27	2	.....	1	.....	2	.....	5	6	5	1	1	3	1	2	3	1	69
19	3	.....	.....	.....	2	3	.....	5	1	3	1	2	1	.....	.....	4	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	69A
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
10	1	.....	.....	.....	1	.....	1	3	2	.....	.....	2	.....	.....	2	.....	69B
8	1	.....	.....	.....	.....	1	.....	3	.....	2	.....	2	.....	.....	.....	1	
7	1	.....	.....	.....	.....	.....	2	1	1	1	.....	.....	.....	1	1	1	69C
5	1	.....	.....	.....	1	1	.....	.....	1	1	1	.....	1	.....	.....	.....	
9	.....	.....	1	.....	1	.....	2	2	1	.....	1	1	1	1	.....	.....	69D
5	1	.....	.....	.....	1	1	.....	2	.....	.....	.....	.....	.....	.....	.....	2	
2,143	512	57	111	21	224	272	267	252	239	234	219	216	180	215	251	275	
1,059	254	27	70	11	113	139	136	129	130	112	97	106	94	101	126	138	
1,084	258	30	41	10	111	133	131	123	109	122	122	110	86	114	125	137	
26	9	.....	2	.....	3	3	4	4	2	3	2	4	4	4	3	1	70
22	6	1	.....	.....	2	2	2	3	2	3	5	1	1	1	3	4	
6	3	.....	1	.....	1	1	1	2	.....	.....	1	.....	1	2	.....	1	70A
5	1	.....	.....	.....	1	.....	1	1	.....	.....	2	.....	.....	.....	.....	1	
20	6	.....	1	.....	2	2	3	2	2	3	1	4	3	2	3	.....	70B
17	5	1	.....	.....	1	2	1	2	2	3	3	1	1	1	3	3	
53	3	.....	3	.....	7	4	9	5	6	5	3	3	4	3	4	6	71
50	5	1	.....	.....	1	6	4	2	8	7	7	8	3	3	2	5	
51	3	.....	3	.....	6	4	9	5	6	4	3	3	4	3	4	6	71A
50	5	1	.....	.....	1	6	4	2	8	7	7	8	3	3	2	5	
2	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	71B
20	3	.....	2	.....	2	.....	5	2	2	4	4	1	.....	3	.....	2	72
2	2	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	
78	31	.....	3	1	11	12	14	7	8	5	5	10	11	11	6	13	73
67	12	.....	4	.....	8	4	4	5	7	8	9	14	9	5	4	6	
468	130	19	35	6	45	75	56	66	59	57	46	51	44	37	57	65	74
538	155	17	24	3	50	82	74	65	53	59	62	50	47	54	65	76	
223	56	9	10	3	23	33	34	25	31	24	20	17	17	16	31	30	74A
260	66	7	11	2	23	35	34	30	24	26	31	26	22	25	30	40	
210	67	8	22	3	19	35	20	38	25	26	22	27	24	20	23	31	74B
247	75	9	13	1	25	37	38	31	27	32	25	23	22	27	29	29	
35	7	2	3	.....	3	7	2	3	3	7	4	7	3	1	3	4	74C
31	14	1	.....	.....	2	10	2	4	2	1	6	1	3	2	6	7	
75	20	2	4	.....	20	8	5	8	9	6	5	8	6	4	7	15	75
102	27	6	4	.....	19	11	10	14	12	13	14	10	11	8	12	5	
44	15	2	2	.....	11	5	4	5	6	4	3	6	3	2	4	10	75A
64	19	3	2	.....	10	7	4	9	11	8	9	7	8	4	7	4	
31	5	.....	2	.....	9	3	1	3	3	2	2	2	3	2	3	5	75B
38	8	3	2	.....	9	4	6	5	1	5	5	3	3	4	5	1	
27	8	2	6	1	3	4	2	2	5	5	2	3	1	10	5	2	76
10	1	.....	.....	1	1	.....	1	1	1	.....	1	1	.....	.....	3	3	
21	5	1	2	.....	1	3	2	2	6	4	1	.....	.....	.....	3	7	77
32	15	3	2	1	3	9	3	3	4	4	2	8	.....	4	5	8	
67	10	2	3	.....	6	5	9	8	8	6	9	4	6	7	9	5	78
65	10	.....	3	3	6	5	7	6	6	11	5	6	4	7	5	13	
2	.....	1	.....	.....	.....	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	79

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
80. Infantile convulsions (under 5 years of age)	M	60	60												
	F	44	44												
81. Chorea	M	3	1	1			1								
	F	8	4	2							1	1			
82. Neuralgia and neuritis	M	5									1	2		2	
	F	10	1	1							2	3		3	
83, Softening of the brain	M	17					7					5		5	
	F	15					2				2	1		10	
84. Other diseases of the nervous system	M	114	9	5	7	14	4			18	29	18		10	
	F	99	18	5	5	3	2			9	21	17		19	
85. Diseases of the eye and annexa	M	8	2			1				1		2		2	
	F	3		1		1								1	
86. Diseases of the ear and of the mastoid process	M	63	42	6						5	5	3		2	
	F	50	28	5					3	7		1		6	
86A. Diseases of the ear	M	37	27	1						3	3	1		2	
	F	28	19	3					2	1		1		2	
86B. Diseases of the mastoid process	M	26	15	5						2	2	2			
	F	22	9	2					1	6				4	
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.															
Total		8,880	74	95	119	296	721	6	17	302	1,377	2,410		3,463	
	M	4,623	41	58	74	181	370	5	3	140	795	1,645		1,311	
	F	4,257	33	37	45	115	351	1	14	162	582	765		2,152	
87-90. Diseases of the heart	M	2,884	35	55	64	127	205	3	3	116	525	957		794	
	F	2,725	31	36	44	82	213		13	142	392	478		1,294	
87. Pericarditis	M	7		1						2	3	1			
	F	6	2						1		1			2	
88. Endocarditis and myocarditis (acute)	M	97	14	10	10	4	2			17	20	12		8	
	F	82	5	9	5	2	1		1	27	11	4		17	
88A. Acute endocarditis	M	53	11	8	6	2				9	12	3		2	
	F	36	4	6	2	1	1		1	13	5			3	
88B. Acute myocarditis	M	44	3	2	4	2	2			8	8	9		6	
	F	46	1	3	3	1				14	6	4		14	
89. Angina pectoris	M	499			4	15	23	1		20	133	193		110	
	F	236			2	10	16			4	49	56		99	
90. Other diseases of the heart	M	2,281	21	44	50	108	180	2	3	77	369	751		676	
	F	2,401	24	27	37	70	196		11	111	331	418		1,176	
90A. Valvular disease	M	432	3	14	17	21	40		1	28	79	142		87	
	F	458	5	8	10	17	38		2	38	61	71		208	
90B. Fatty degeneration of the heart	M	13				1	3				3	4		2	
	F	13					1				4	1		7	
90C. Aortic insufficiency	M	2										1		1	
	F	1									1				
90D. Chronic endocarditis	M	298	7	17	12	14	20		1	21	46	96		64	
	F	364	9	13	11	10	24		7	34	65	55		136	
90E. Chronic myocarditis	M	1,181	7	7	16	52	93		1	20	178	387		420	
	F	1,218	7	2	12	35	105		1	22	155	229		650	
90F. Others under this title	M	355	4	6	5	20	24	2		8	63	121		102	
	F	347	3	4	4	8	28		1	16	46	62		175	
91. Diseases of the arteries	M	1,649	1	1	4	48	163	2		14	240	665		512	
	F	1,462			1	32	136	1		12	170	276		834	
91A. Aneurysm	M	38		1		8	2			2	13	11		1	
	F	18				1					7	2		8	
91B. Arteriosclerosis	M	1,595			4	39	159	2		11	224	648		508	
	F	1,438			1	31	135	1		12	161	274		823	
90C. Other diseases of the arteries	M	16				1	2			1	3	6		3	
	F	6					1				2			3	
92. Embolism and thrombosis (not cerebral)	M	64	1	2	4	4	2			8	19	21		3	
	F	35	2			1			1	5	8	7		11	
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	M	14	1		1					2	7	1		2	
	F	25					2			2	8	4		9	

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
60					5	4	8	5	8	5	6	4	1	5	3	6	80
43				1	4	1	3	7	3	5	3	2	2	6	6	2	
2	1											2				1	81
5	3				2		2				2	1	1				
5								1				1	1	1	1		82
8	2						1	1	1	1		1		2	2	1	
11	4		1	1		4	2	1	1	1	1	2	1	1	2	1	83
13	2				3	1	3	2	1					2	3		
86	21		6	1	7	8	9	10	9	7	9	9	11	11	16	8	84
79	13	2	4	1	6	7	8	8	6	6	7	7	7	19	10	8	
6	2					2					1	1			3	1	85
3						1				1	1						
52	7		3	1	3	6	10	8	6	4	3	3	4	4	7	5	86
45	5				5	4	9	5	5	4	4	1	1	1	5	6	
30	4		2	1	3	1	8	4	4	1	1	2	3	1	5	4	86A
26	2				2	4	5	4	1	2	2		1	1	4	2	
22	3		1			5	2	4	2	3	2	1	1	3	2	1	86B
19	3				3		4	1	4	2	2	1			1	4	
6,177	2,061	266	303	73	801	764	828	808	803	735	643	596	644	715	722	821	
3,180	1,089	127	174	53	405	425	431	446	412	362	326	313	328	375	380	420	
2,997	972	139	129	20	396	339	397	362	391	373	317	283	316	340	342	401	
1,991	659	78	119	37	235	266	268	264	276	218	198	204	210	238	250	257	87–90
1,913	622	93	86	11	258	220	242	240	254	230	200	180	205	204	218	274	
4	1		2				2				1	3		1			87
3	2	1			1						1	1		2		1	
68	14	3	11	1	7	4	8	20	7	5	4	8	10	10	7	7	88
54	20	4	3	1	5	4	11	5	15	8	9	6	10	4	2	3	
36	8	1	7	1	3	3	5	8	6	4	2	5	4	3	5	5	88A
27	6	1	2		2	1	3	2	8	5	5	2	3	3	1	1	
32	6	2	4		4	1	3	12	1	1	2	3	6	7	2	2	88B
27	14	3	1	1	3	3	8	3	7	3	4	4	7	1	1	2	
358	104	17	17	3	49	49	53	61	44	36	31	28	38	37	36	37	89
172	45	9	7	3	18	23	21	21	22	14	14	18	17	19	20	29	
1,561	540	58	89	33	179	213	205	183	225	177	162	165	162	190	207	213	90
1,684	555	79	76	7	234	193	210	214	217	207	177	155	178	179	196	241	
307	93	9	19	4	30	44	43	33	49	30	28	42	31	29	42	31	90A
330	91	17	19	1	39	35	43	43	41	39	38	31	34	35	38	42	
13					1	2	1		3		1	1		1	1	2	90B
10	3				1	3			1	1	1	2		1	1	2	
1	1										1				1		90C
1														1			
201	69	10	14	4	22	34	22	22	37	30	24	18	17	24	20	28	90D
270	65	16	11	2	32	23	34	28	42	35	30	28	28	29	19	36	
793	291	34	45	18	96	91	110	104	105	98	79	76	95	103	114	110	90E
812	329	38	36	3	125	96	91	115	105	101	95	70	87	96	111	126	
246	86	5	11	7	30	42	29	24	31	19	29	28	19	33	29	42	90F
261	67	8	10	1	37	36	42	28	28	31	13	24	29	17	27	35	
1,124	417	45	48	15	160	144	157	177	127	138	124	104	111	134	120	153	91
1,039	331	44	39	9	131	117	152	116	132	137	112	100	99	126	118	122	
23	14		1		6	3	7	4	2	5	2	2		3	2	2	91A
14	2	2			3		1	2		2	1	6	1	1	1		
1,093	398	44	45	15	152	139	149	172	123	131	122	102	110	129	116	150	91B
1,020	329	41	39	9	128	116	150	112	132	135	111	94	98	124	117	121	
8	5	1	2		2	2	1	1	2	2			1	2	2	1	91C
5		1				1	1	2						1		1	
46	11	4	2	1	6	7	5	5	7	4	3	4	6	3	9	5	92
24	11				2		2	4	2	4	1	2	8	7	1	2	
10	1		3		4	4	1			1			1		1	2	93
13	8	1	3		3	2	1	1	1	2	4	1	2	1	4	3	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION.

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
94. Diseases of the lymphatic system (lymphangitis, etc.)	M	7	3			2					2				
	F	5								1	2			2	
95. Haemorrhage without specified cause	M	2	1		1										
	F	4		1							1			2	
96. Other diseases of the circulatory system	M	3									2	1			
	F	1									1				
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.															
Total		3,330	985	89	103	128	145	3	18	249	402	453	1	754	
	M	1,776	536	54	72	76	64	1	8	138	262	284		281	
	F	1,554	449	35	31	52	81	2	10	111	140	169	1	473	
97. Diseases of the nasal fossae and their annexa	M	8		2	2					3				1	
	F	12	3	2	1					3	1			2	
98. Diseases of the larynx	M	14	11	1		1						1			
	F	15	10	1		1					1			2	
98A. Laryngismus stridulus	F	1	1												
98B. Laryngitis	M	9	6	1		1						1			
	F	10	5	1		1					1			2	
98C. Croup	M	5	5												
	F	2	2												
98D. Other diseases of the larynx	F	2	2												
99. Bronchitis	M	64	19	1	3	2	2			2	2	15		18	
	F	85	23	1			11				2	11		37	
99A. Bronchitis, acute	M	32	17	1	2	1	1				1	5		4	
	F	35	19				2				1	2		11	
99B. Bronchitis, chronic	M	22	1			1	1			1	1	8		9	
	F	33	1	1			8				1	5		17	
99C. Bronchitis, not otherwise defined, under 5 years of age	M	1	1												
	F	3	3												
99D. Bronchitis, not otherwise defined, 5 years or over	M	9			1					1		2		5	
	F	14					1					4		9	
100. Broncho-pneumonia (including capillary bronchitis)	M	515	284	8	11	9	20	1	1	19	37	59		66	
	F	487	211	7	8	12	26		1	20	30	40	1	131	
100A. Broncho-pneumonia	M	508	280	8	11	9	20	1	1	18	37	59		64	
	F	481	208	7	8	12	26		1	20	30	39	1	129	
100B. Capillary bronchitis	M	7	4							1				2	
	F	6	3									1		2	
101. Pneumonia	M	946	196	34	46	53	36		5	93	172	157		154	
	F	788	181	20	15	31	37	2	8	70	86	101		237	
101A. Pneumonia, lobar	M	519	62	20	37	36	22		5	66	115	80		76	
	F	384	58	9	8	17	15	1	7	51	54	52		112	
101B. Pneumonia, not otherwise defined	M	427	134	14	9	17	14			27	57	77		78	
	F	404	123	11	7	14	22	1	1	19	32	49		125	
102. Pleurisy	M	82	16	6	5	6			1	12	16	12		8	
	F	50	11	3	6	2	1			7	8	4		8	
103. Congestion and haemorrhagic infarct of the lung	M	44	2			2	1				1	15		23	
	F	66	4			3	5			2	4	8		40	
104. Gangrene of the lung	M	3				1				2					
	F	1									1				
105. Asthma	M	52	1	1	2	2	3			1	20	14		8	
	F	22	1			1				3	4	3		10	
106. Pulmonary emphysema	M	3								1		2			
	F	1				1									
107. Other diseases of the respiratory system (tuberculosis excepted)	M	45	7	1	3		2		1	5	14	9		3	
	F	27	5	1	1	1	1		1	6	3	2		6	
107A. Chronic interstitial pneumonia including occupational diseases of the lungs	M	4			1					1	1	1			

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NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
5			2			3			1		1					2	94
4		1							1				1	2	1		
1	1					1										1	95
3			1		2				1				1				
3									1	1		1					96
1								1									
2,469	643	76	119	23	325	350	391	328	353	252	133	104	147	236	229	482	
1,297	343	38	81	17	170	174	214	184	187	146	74	67	81	128	115	236	
1,172	300	38	38	6	155	176	177	144	166	106	59	37	66	108	114	246	
6	2					1		1	2		1		1	1	1		97
9	3					1	3	4		1			1	1		1	
13	1				2	3	2		2		1		1	1	2		98
13	1	1			4	1	1		1		2	1	1	1	1	2	
1					1												98A
8	1					3	2		1					1	2		98B
8	1	1			1		1		1		2		1	1	1	2	
5					2				1		1		1				98C
2					2												
2						1						1					
48	11	1	4		6	5	5	5	7	4	3	4	3	5	7	10	99
66	15	2	1	1	12	9	8	6	10	5	1	2	5	7	3	17	
28	2	1	1		2	2	2	3	5	3	2	2	3	2	4	2	99A
30	3		1	1	2	3	4	1	8	3		2	3	4		5	
13	7		2		3	2	2	2	1	1	1	2		2	2	4	99B
25	7	1			6	5	3	4	2	2	1		2	3		5	
1																1	99C
3					1										1	1	
6	2		1		1	1	1		1					1	1	3	99D
8	5	1			3	1	1	1							2	6	
412	72	11	17	3	37	47	68	52	58	41	16	18	28	34	37	79	100
376	87	12	8	4	42	61	49	48	55	33	20	9	20	33	40	77	
406	71	11	17	3	37	47	68	51	58	41	16	17	27	33	36	77	100A
371	86	12	8	4	41	61	49	47	54	32	20	9	20	31	40	77	
6	1							1				1	1	1	1	2	100B
5	1				1			1	1	1				2			
676	193	23	42	12	108	103	117	104	94	78	34	29	38	70	54	117	101
593	155	17	22	1	79	89	96	79	89	50	22	21	28	52	57	126	
347	123	15	25	9	54	66	72	63	43	34	18	20	16	45	34	54	101A
277	85	11	10	1	42	44	44	39	41	21	12	8	16	31	33	53	
329	70	8	17	3	54	37	45	41	51	44	16	9	22	25	20	63	101B
316	70	6	12		37	45	52	40	48	29	10	13	12	21	24	73	
52	21	1	7	1	8	6	8	6	7	11	3	5	4	7	5	12	102
38	8	2	2		4	4	6	3	5	6	4	2	3	7	3	3	
26	16	1	1		4	2	6	5	6	2	3	3	2	5	4	2	103
43	19	3	1		9	9	10	3	3	4	3		3	5	4	13	
1	1		1						1			1		1			104
			1												1		
33	16	1	2		2	1	5	7	3	6	7	4	3	2	2	10	105
15	5	1	1		2		2			4	4		2	1	3	4	
1	1		1			1					1	1					106
			1								1						
29	9		6	1	3	5	3	4	7	4	5	2	1	2	3	6	107
19	7		1		3	2	2	1	3	3	2	2	3	1	2	3	
2	1		1				1					1			1	1	107A

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
107B. Diseases of the mediastinum	M	1	1												
107C. Others under this title	M	40	6	1	2		2		1	4	13	8		3	
	F	27	5	1	1	1	1		1	6	3	2		6	
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.															
Total		2,660	1,042	119	101	96	69		16	256	375	252		334	
	M	1,443	587	77	58	61	34		5	140	204	163		114	
	F	1,217	455	42	43	35	35		11	116	171	89		220	
108. Diseases of the mouth and annexa	M	33	3	2	4	4	2		1	2	8	3		4	
	F	20	5				1			6	4	1		3	
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	59	36	4	3	1			1	8	2	2		2	
	F	68	29	6	6		4		1	7	9	3		3	
109A. Adenoid vegetations	M	1												1	
	F	1										1			
109B. Pharynx and tonsils	M	58	36	4	3	1			1	8	2	2		1	
	F	67	29	6	6		4		1	7	9	2		3	
110. Diseases of the oesophagus	M	3	1								1			1	
	F	1												1	
111. Ulcer of the stomach and duodenum	M	161	1	7	13	16	4			32	44	27		17	
	F	40		3		5	3			4	7	8		10	
111A. Ulcer of the stomach	M	84		3	6	7	2			14	24	16		12	
	F	26		1		3	1			3	7	3		8	
111B. Ulcer of the duodenum	M	77	1	4	7	9	2			18	20	11		5	
	F	14		2		2	2			1		5		2	
112. Other diseases of the stomach (cancer excepted)	M	108	37		3	4	2			7	18	20		17	
	F	92	29	1		3	4			5	10	9		31	
113. Diarrhoea and enteritis (under 2 years of age)	M	359	359												
	F	284	284												
114. Diarrhoea and enteritis (2 years or over)	M	71	37	2	2	3	2			5	5	8		7	
	F	88	35		7	2	7			7	4	4		22	
116. Diseases due to other intestinal parasites	M	1	1												
116C. Nematodes (other than ankylostoma)	M	1	1												
117. Appendicitis and typhlitis	M	255	64	51	12	5	1		1	56	38	17		10	
	F	178	47	29	13	5	3		5	29	26	6		15	
118. Hernia, intestinal obstruction	M	170	29	5	11	10	14			12	31	34		24	
	F	143	12	1	6	4	7		1	21	30	20		41	
118A. Hernia	M	63	5	1	5	6	3			4	13	12		14	
	F	45				1	5			5	13	7		14	
118B. Intestinal obstruction	M	107	24	4	6	4	11			8	18	22		10	
	F	98	12	1	6	3	2		1	16	17	13		27	
119. Other diseases of the intestines	M	35	6		1	2	2		1	4	8	8		3	
	F	31	4		1	5			1	4	5	2		9	
120. Acute yellow atrophy of the liver	M	4	2								1	1			
	F	11	1		1		1		1	4	2			1	
122. Cirrhosis of the liver	M	58			2	8	5			6	14	11		12	
	F	46	1	1	1	3	1			4	15	6		14	
122A. Specified as alcoholic	M	3								1	2				
	F	1			1										
122B. Not specified as alcoholic	M	55			2	8	5			5	12	11		12	
	F	45	1	1		3	1			4	15	6		14	
123. Bilary calculi	M	15					1			1	6	5		2	
	F	53			2	1			1	4	16	4		25	
124. Other diseases of the liver	M	64	2	1	5	5	1			3	19	19		9	
	F	117	2		3	5	4			12	33	22		36	
125. Disease of the pancreas	M	12			1	1					3	4		3	
	F	15			1					4	5	3		2	
126. Peritonitis without specified cause	M	35	9	5	1	2			1	4	6	4		3	
	F	30	6	1	2	2			1	5	5	1		7	

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	107B
26	8	.....	5	1	3	5	2	3	7	4	5	1	1	2	2	5	107C
19	7	.....	1	.....	3	2	2	1	3	3	2	2	3	1	2	3	
2,110	389	56	91	14	182	185	203	196	205	182	220	295	340	266	208	178	
1,134	204	30	64	11	91	97	107	110	114	97	117	156	198	140	111	105	
976	185	26	27	3	91	88	96	86	91	85	103	139	142	126	97	73	
24	7	1	1	.....	1	2	3	5	1	1	3	3	1	7	1	5	108
15	3	2	.....	.....	3	.....	1	4	1	.....	3	1	1	3	2	1	
49	8	1	1	.....	6	7	4	3	10	5	7	2	6	.....	4	5	109
57	8	1	2	.....	9	6	8	4	7	6	4	5	3	5	7	4	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	109A
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
48	8	1	1	.....	6	7	3	3	10	5	7	2	6	.....	4	5	109B
56	8	1	2	.....	9	5	8	4	7	6	4	5	3	5	7	4	
3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	110
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
90	55	3	11	2	15	13	11	14	16	10	18	5	15	11	19	14	111
34	5	1	.....	.....	3	5	1	1	5	4	4	6	2	4	2	3	
42	32	2	7	1	7	8	6	7	8	6	12	2	6	4	11	7	111A
21	4	1	.....	.....	2	3	.....	1	4	4	3	5	.....	3	.....	1	
48	23	1	4	1	8	5	5	7	8	4	6	3	9	7	8	7	111B
13	1	.....	.....	.....	1	2	1	.....	1	.....	1	1	2	1	2	2	
86	15	3	4	.....	4	8	9	16	9	10	12	14	3	8	9	6	112
77	14	.....	1	.....	1	8	4	13	8	6	14	5	9	6	10	8	
351	.....	5	.....	3	12	13	11	11	8	11	19	58	116	60	23	17	113
281	.....	2	.....	1	9	9	9	10	11	12	12	58	80	47	25	2	
54	9	3	5	.....	9	2	5	5	5	1	8	9	7	7	8	5	114
75	10	2	1	.....	7	7	2	6	4	8	9	10	16	9	4	6	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	116
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	116C
197	39	5	14	.....	16	21	23	19	24	23	28	28	22	17	18	16	117
136	30	3	9	.....	16	19	18	13	18	18	15	14	11	14	12	10	
123	30	6	8	3	12	11	24	13	16	11	12	16	19	10	10	16	118
88	46	7	2	.....	13	10	15	2	16	11	14	15	5	13	14	15	
41	14	3	4	1	4	4	7	7	6	4	3	4	10	3	6	5	118A
25	16	3	1	.....	5	4	3	.....	4	2	6	4	1	6	2	8	
82	16	3	4	2	8	7	17	6	10	7	9	12	9	7	4	11	118B
63	30	4	1	.....	8	6	12	2	12	9	8	11	4	7	12	7	
29	4	.....	2	.....	3	6	2	3	1	3	2	4	1	4	4	2	119
20	8	.....	2	1	3	3	3	2	1	1	5	4	.....	4	3	2	
3	1	.....	.....	.....	.....	.....	2	.....	.....	1	1	.....	.....	.....	.....	.....	120
8	1	1	1	.....	2	1	2	1	.....	.....	.....	2	1	1	1	.....	
40	7	1	8	2	4	3	4	5	8	4	2	6	3	8	6	5	122
32	11	3	.....	.....	4	4	8	5	4	3	4	5	1	5	.....	3	
2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	122A
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	
38	6	1	8	2	4	2	4	5	8	4	2	5	3	7	6	5	122B
31	11	3	.....	.....	4	4	8	5	3	3	4	5	1	5	.....	3	
8	5	1	1	.....	1	1	.....	1	1	2	1	2	2	.....	1	3	123
46	3	.....	4	.....	5	4	6	6	5	3	6	4	3	3	3	5	
38	16	1	8	1	4	4	6	8	9	12	1	3	3	4	6	4	124
71	39	2	4	1	9	10	18	11	7	8	9	6	7	9	11	12	
9	3	.....	.....	.....	1	3	1	1	1	.....	.....	2	.....	1	1	1	125
9	5	1	.....	.....	3	1	.....	2	2	1	1	.....	1	3	1	.....	
29	5	.....	1	.....	3	3	2	5	4	3	3	4	.....	1	1	6	126
26	2	1	1	.....	4	1	1	6	2	4	3	4	2	.....	1	2	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.															
Total		2,624	75	41	50	96	159	3	11	228	511	693	.....	757	.....
	M	1,517	40	19	26	54	100	3	2	79	281	524	.....	389	.....
	F	1,107	35	22	24	42	59	.....	9	149	230	169	.....	368	.....
128. Acute nephritis (including unspecified, under 10 years of age)	M	80	19	8	10	3	.....	.....	2	12	10	12	.....	4	.....
	F	66	11	6	4	1	1	.....	2	15	11	3	.....	12	.....
129. Chronic nephritis (Bright's disease)	M	946	9	10	11	39	59	3	.....	56	226	311	.....	222	.....
	F	797	9	10	7	33	53	.....	5	69	160	146	.....	305	.....
131. Other diseases of the kidneys and annexa	M	73	8	1	2	3	4	.....	.....	8	13	21	.....	13	.....
	F	81	15	1	3	1	3	.....	1	11	16	11	.....	19	.....
132. Calculi of the urinary passages	M	22	1	.....	.....	2	.....	.....	.....	2	4	6	.....	7	.....
	F	9	.....	1	.....	.....	.....	.....	.....	3	2	1	.....	2	.....
133. Diseases of the bladder	M	56	.....	.....	1	1	7	.....	.....	.....	5	18	.....	24	.....
	F	11	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	8	.....
134. Diseases of the urethra, urinary abscess, etc.	M	10	.....	.....	.....	2	1	.....	.....	.....	5	1	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
134A. Stricture of the urethra.	M	6	.....	.....	.....	1	1	.....	.....	.....	2	1	.....	1	.....
134B. Other diseases of the urethra	M	4	.....	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
135. Diseases of the prostate	M	324	.....	.....	2	4	28	.....	.....	1	18	153	.....	118	.....
136. Non-venereal diseases of the male genital organs	M	6	3	.....	.....	.....	1	.....	.....	.....	.....	2	.....	.....	.....
137. Cysts and other benign tumours of the ovary	F	30	.....	.....	1	1	1	.....	.....	12	7	3	.....	5	.....
138. Salpingitis and pelvic abscess	F	21	.....	2	.....	.....	.....	.....	.....	12	3	.....	.....	4	.....
139. Benign tumours of the uterus	F	39	.....	.....	4	1	1	.....	.....	11	8	4	.....	10	.....
140. Non-puerperal uterine haemorrhage	F	5	.....	1	1	1	.....	.....	.....	.....	2	.....	.....	.....	.....
141. Other diseases of the female genital organs	F	46	.....	1	4	4	.....	.....	1	15	18	.....	.....	3	.....
142. Non-puerperal diseases of the breast (cancer excepted)	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
CLASS VIII.—THE PUERPERAL STATE.															
Total		396	.....	16	9	.....	.....	.....	85	276	6	.....	.....	4	.....
143. Accidents of pregnancy	F	36	.....	1	1	.....	.....	.....	8	23	3	.....	.....	.....	.....
143A. Abortion	F	10	.....	.....	.....	.....	.....	.....	4	5	1	.....	.....	.....	.....
143B. Ectopic gestation	F	15	.....	.....	1	.....	.....	.....	1	13	.....	.....	.....	.....	.....
143C. Others under this title	F	9	.....	.....	.....	.....	.....	.....	3	4	2	.....	.....	.....	.....
143D. Abortion, self-induced	F	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
144. Puerperal haemorrhage	F	45	.....	1	1	.....	.....	.....	5	38	.....	.....	.....	.....	.....
145. Other accidents of labour	F	51	.....	2	.....	.....	.....	.....	5	43	.....	.....	.....	1	.....
145A. Caesarean section	F	19	.....	.....	.....	.....	.....	.....	1	18	.....	.....	.....	.....	.....
145B. Difficult labour	F	5	.....	.....	.....	.....	.....	.....	.....	5	.....	.....	.....	.....	.....
145C. Other surgical operations and instrumental delivery	F	12	.....	1	.....	.....	.....	.....	1	9	.....	.....	.....	1	.....
145D. Uncontrollable vomiting	F	15	.....	1	.....	.....	.....	.....	3	11	.....	.....	.....	.....	.....
146. Puerperal septicaemia	F	120	.....	8	3	.....	.....	.....	30	75	2	.....	.....	2	.....
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	34	.....	.....	.....	.....	.....	.....	6	27	.....	.....	.....	1	.....
148. Puerperal albuminuria and convulsions	F	97	.....	4	4	.....	.....	.....	29	59	1	.....	.....	.....	.....
149. Following childbirth (not otherwise defined)	F	13	.....	.....	.....	.....	.....	.....	2	11	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1,824	580	84	105	31	255	205	241	233	215	221	185	179	226	196	223	245	
1,046	341	44	65	21	149	117	141	142	125	132	112	109	121	109	124	136	
778	239	40	40	10	106	88	100	91	90	89	73	70	105	87	99	109	
54	15	2	7	2	7	7	10	7	7	4	9	6	6	5	8	4	128
48	16	1	1	.....	6	7	4	8	4	9	4	1	3	5	8	7	
674	199	27	33	13	94	73	88	85	81	77	66	72	69	70	84	87	129
556	171	30	30	10	80	68	67	62	67	64	54	52	73	61	67	82	
50	14	2	5	2	4	5	8	7	4	9	7	9	8	4	1	7	131
60	17	3	1	.....	6	5	7	6	4	5	8	7	10	8	8	7	
13	6	.....	2	1	3	1	3	2	1	1	2	.....	1	2	1	5	132
8	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	2	1	1	2	1	
35	16	1	3	1	6	6	10	7	5	2	1	3	4	4	6	2	133
6	4	1	.....	.....	1	.....	2	.....	.....	.....	.....	1	2	2	1	2	
4	4	1	.....	1	.....	.....	1	2	.....	.....	2	.....	1	2	.....	2	134
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
2	2	1	.....	1	.....	.....	1	.....	.....	.....	2	.....	1	1	.....	1	134A
2	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	1	134B
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
210	87	11	15	1	35	24	19	32	27	38	25	19	31	21	24	29	135
6	.....	.....	.....	.....	.....	1	2	.....	.....	1	.....	.....	1	1	.....	.....	136
21	5	2	2	....	3	1	2	1	4	4	2	2	2	3	3	3	137
15	3	1	2	.....	2	.....	4	2	1	2	.....	.....	5	3	.....	2	138
31	8	.....	.....	.....	5	3	7	2	5	2	2	2	4	1	3	3	139
4	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	1	1	1	.....	.....	140
27	14	1	4	.....	2	4	6	8	4	3	3	2	4	2	6	2	141
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	142
261	83	17	34	1	32	40	51	42	24	41	36	29	25	27	18	31	
19	8	.....	9	.....	.....	.....	4	4	3	7	4	3	2	2	1	6	143
6	2	.....	2	.....	.....	.....	3	1	1	1	.....	2	.....	.....	1	1	143A
8	2	.....	5	.....	.....	.....	.....	3	1	3	3	1	1	2	.....	1	143B
5	3	.....	1	.....	.....	.....	.....	.....	.....	3	1	.....	1	.....	.....	4	143C
.....	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	143D
31	9	.....	5	.....	8	4	7	2	3	5	1	5	3	2	2	3	144
31	12	1	6	1	4	6	7	5	2	5	7	6	4	1	3	1	145
12	5	1	1	.....	1	2	3	2	1	3	3	2	2	.....	.....	.....	145A
2	2	.....	1	.....	1	1	1	.....	.....	.....	1	1	.....	.....	.....	.....	145B
7	2	.....	2	1	1	2	2	1	.....	2	1	1	.....	.....	2	.....	145
10	3	.....	2	.....	1	1	1	2	1	.....	2	2	2	1	1	1	145D
79	27	6	8	.....	8	15	17	14	9	11	11	5	6	11	4	9	146
21	8	4	1	.....	2	5	3	2	3	4	1	5	1	1	4	3	147
71	18	5	3	.....	9	9	11	12	4	8	11	4	8	9	4	8	148
9	1	1	2	.....	1	1	2	3	.....	1	1	1	1	1	.....	1	149

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–65	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.															
Total		211	30	6	1	7	17	.....	1	9	21	45	.....	74	.....
	M	119	16	4	.....	4	10	.....	.....	3	14	37	.....	31	.....
	F	92	14	2	1	3	7	.....	1	6	7	8	.....	43	.....
151. Gangrene	M	58	.....	1	.....	3	6	.....	.....	.....	3	22	.....	23	.....
	F	44	.....	.....	.....	2	5	.....	.....	.....	2	6	.....	29	.....
152. Furuncle	M	11	.....	.....	.....	1	2	.....	.....	.....	5	2	.....	1	.....
	F	7	3	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	.....
153. Acute abscess	M	27	8	2	.....	.....	1	.....	.....	3	6	4	.....	3	.....
	F	17	4	1	.....	.....	.....	.....	1	4	3	.....	.....	4	.....
154. Other diseases of the skin and annexa	M	23	8	1	.....	.....	1	.....	.....	.....	.....	9	.....	4	.....
	F	24	7	1	1	1	2	.....	.....	.....	2	2	.....	8	.....
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.															
Total		88	27	8	4	2	5	.....	1	5	9	12	.....	15	.....
	M	48	14	7	3	1	2	.....	.....	3	7	8	.....	3	.....
	F	40	13	1	1	1	3	.....	1	2	2	4	.....	12	.....
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	35	13	4	1	1	2	.....	.....	1	4	6	.....	3	.....
	F	30	10	1	1	.....	3	.....	1	1	1	3	.....	9	.....
156. Diseases of the joints (tuberculosis and rheumatism excepted)	M	11	1	2	2	.....	.....	.....	.....	2	3	1	.....	.....	.....
	F	8	3	.....	.....	1	.....	.....	.....	1	1	.....	.....	2	.....
158. Other diseases of the organs of locomotion	M	2	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....
CLASS XI.—MALFORMATIONS.															
Total		485	468	10	3	.....	.....	1	.....	.....	3	.....	.....	.....	.....
	M	249	241	5	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	236	227	5	1	.....	.....	1	.....	.....	2	.....	.....	.....	.....
159. Congenital malformations (stillbirths not included)	M	249	241	5	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	236	227	5	1	.....	.....	1	.....	.....	2	.....	.....	.....	.....
159A. Congenital hydrocephalus	M	16	15	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	17	16	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
159B. Congenital malformations of the heart	M	129	124	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	97	94	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
159C. Others under this title	M	104	102	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	122	117	3	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
CLASS XII.—DISEASES OF EARLY INFANCY.															
Total		2,323	2,323	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	M	1,309	1,309	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1,014	1,014	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
160. Congenital debility, icterus and sclerema	M	198	198	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	143	143	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
161. Premature birth, injury at birth	M	988	988	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	762	762	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
161A. Premature birth	M	811	811	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	666	666	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH.—ONTARIO, 1928—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
151	45	8	6	1	11	22	23	16	14	14	21	19	13	18	21	19	
85	24	6	4	.....	7	11	13	10	11	10	8	13	4	11	11	10	
66	21	2	2	1	4	11	10	6	3	4	13	6	9	7	10	9	
40	15	2	1	.....	3	9	6	5	5	7	1	6	.....	4	5	7	151
30	11	1	1	1	2	5	3	2	1	3	8	4	5	2	5	4	
9	1	.....	1	.....	.....	.....	1	.....	1	1	.....	1	.....	4	3	.....	152
6	1	.....	.....	.....	1	.....	1	1	.....	.....	2	.....	.....	1	.....	1	
19	4	3	1	.....	1	1	3	5	3	1	6	1	1	1	2	2	153
8	7	1	1	.....	.....	4	2	3	1	.....	2	1	1	.....	1	2	
17	4	1	1	.....	3	1	3	.....	2	1	1	5	3	2	1	1	154
22	2	.....	.....	.....	1	2	4	.....	1	1	1	1	3	4	4	2	
70	13	3	1	1	4	5	2	7	15	6	9	8	13	10	5	4	
38	7	1	1	1	1	1	.....	6	10	4	5	4	7	5	3	2	
32	6	2	.....	.....	3	4	2	1	5	2	4	4	6	5	2	2	
31	3	1	.....	.....	.....	1	.....	4	6	3	3	3	6	5	2	2	155
23	5	2	.....	.....	1	1	2	1	4	1	4	4	5	4	1	2	
6	4	.....	1	.....	.....	.....	.....	2	4	1	2	.....	1	.....	1	.....	156
8	.....	.....	.....	.....	2	1	.....	.....	1	1	.....	.....	1	1	1	.....	
1	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	158
1	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
480	4	1	.....	.....	41	38	52	37	39	44	37	36	28	51	48	34	
245	3	1	.....	.....	21	18	26	20	20	21	21	17	14	30	28	13	
235	1	.....	.....	.....	20	20	26	17	19	23	16	19	14	21	20	21	
245	3	1	.....	.....	21	18	26	20	20	21	21	17	14	30	28	13	159
235	1	.....	.....	.....	20	20	26	17	19	23	16	19	14	21	20	21	
16	.....	.....	.....	.....	2	1	.....	4	1	.....	3	.....	1	2	2	.....	159A
17	.....	.....	.....	.....	1	4	4	1	1	2	1	.....	.....	2	1	.....	
127	2	.....	.....	.....	12	10	16	9	13	11	8	11	6	13	11	9	159B
97	.....	.....	.....	.....	10	8	11	7	7	10	8	7	5	8	5	11	
102	1	1	.....	.....	7	7	10	7	6	10	10	6	7	15	15	4	159C
121	1	.....	.....	.....	9	8	11	9	11	11	7	12	9	11	14	10	
2,312	4	.....	1	6	212	188	227	189	220	185	180	151	177	200	185	209	
1,304	3	.....	.....	2	121	119	135	106	122	103	107	71	102	123	98	102	
1,008	1	.....	1	4	91	69	92	83	98	82	73	80	75	77	87	107	
196	1	.....	.....	1	16	17	24	12	22	13	13	7	20	24	13	17	160
142	.....	.....	.....	1	11	12	10	20	10	5	4	15	13	15	10	18	
985	2	.....	.....	1	95	88	99	78	87	84	85	60	73	88	74	77	161
757	1	.....	1	3	73	52	69	50	77	67	60	57	59	50	69	79	
808	2	.....	.....	1	74	69	81	62	69	77	76	47	63	73	64	56	161A
661	1	.....	1	3	63	42	59	42	70	59	57	52	50	40	58	74	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
161B. Injury at birth	M	177	177												
	F	96	96												
162. Other diseases peculiar to early infancy	M	121	121												
	F	109	109												
162A. Specified diseases	M	117	117												
	F	104	104												
162B. Unspecified causes under 3 months	M	4	4												
	F	5	5												
163. Lack of care	M	2	2												
CLASS XIII.—OLD AGE.															
Total		636					63				3	146		424	
	M	269					22				2	108		137	
	F	367					41				1	38		287	
164. Senility	M	269					22				2	108		137	
	F	367					41				1	38		287	
CLASS XIV.—EXTERNAL CAUSES.															
Total		2,638	474	313	217	105	106	23	33	399	355	216	5	392	
	M	1,911	329	275	194	90	61	23	19	314	292	152	5	157	
	F	727	145	38	23	15	45		14	85	63	64		235	
165-174. Suicides	M	207	1	15	28	19	8	3	3	34	59	11		26	
	F	78	1	7	7	3	1		5	30	10	2		12	
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	13			5	1			1	3	1	1		1	
	F	15	1	2	1				2	5	2	1		1	
166. Suicide by corrosive substances	M	13			1				1	3	6			2	
	F	20		2	3				2	9	2			2	
167. Suicide by poisonous gas	M	15			1		2			4	5			3	
	F	10			1	1			1	4				3	
168. Suicide by hanging or strangulation	M	67		5	11	6	2		1	10	18	5		9	
	F	11			1	1				3	3	1		2	
169. Suicide by drowning	M	24		2	1	4	1	2		2	7	3		2	
	F	9		1	1	1				4				2	
170. Suicide by firearms	M	52	1	7	8	4	2	1		9	12	1		7	
	F	3		1						2					
171. Suicide by cutting or piercing instruments	M	18			1	4	1			2	8	1		1	
	F	4								1	2			1	
172. Suicide by jumping from high places	M	2								1	1				
	F	5		1			1			1	1			1	
173. Suicide by crushing	M	1		1											
	F	1								1					
174. Other suicides	M	2									1			1	
175. Poisoning by food	M	7	4			1				1				1	
	F	4	2								1			1	
176. Poisoning by venomous animals	F	1								1					
177. Other acute accidental poisonings (gas excepted)	M	16	10	1		1				2		1		1	
	F	14	4		1		2			4	1			2	
178. Conflagration	M	32	16	1	2	1			1	2	6	3			
	F	12	4	2						3	1	1		1	
179. Accidental burns and scalds (conflagration excepted)	M	62	35	4	7	2	3			6	2	3			
	F	81	46	4	1		1			8	8	7		6	
180. Accidental mechanical suffocation	M	13	9	2	1		1								
	F	15	13											2	

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
177	.....	.....	.....	.....	21	19	18	16	18	7	9	13	10	15	10	21	161B
96	.....	.....	.....	.....	10	10	10	8	7	8	3	5	9	10	11	5	
121	.....	.....	.....	.....	10	13	12	16	12	6	9	4	9	11	11	8	162
109	.....	.....	.....	.....	7	5	13	13	11	10	9	8	3	12	8	10	
117	.....	.....	.....	.....	9	12	12	15	11	6	9	4	9	11	11	8	162A
104	.....	.....	.....	.....	6	5	11	13	11	10	9	8	3	11	8	9	
4	.....	.....	.....	.....	1	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	162B
5	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	1	.....	1	
2	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	163
378	200	20	26	12	55	56	51	48	49	57	46	43	51	52	48	80	
150	90	10	13	6	21	27	21	27	17	22	16	19	28	22	18	31	
228	110	10	13	6	34	29	30	21	32	35	30	24	23	30	30	49	
150	90	10	13	6	21	27	21	27	17	22	16	19	28	22	18	31	164
228	110	10	13	6	34	29	30	21	32	35	30	24	23	30	30	49	
1,681	468	128	266	95	179	208	161	154	209	215	294	296	226	260	230	206	
1,180	321	95	232	83	123	157	113	111	156	154	220	233	159	191	165	129	
501	147	33	34	12	56	51	48	43	53	61	74	63	67	69	65	77	
115	47	10	25	10	18	10	16	15	17	23	15	20	15	28	16	14	165–
40	23	5	8	2	5	8	1	5	9	7	5	14	5	4	11	4	174
8	3	1	.....	1	.....	1	.....	2	1	2	.....	2	2	1	1	1	165
9	5	.....	1	.....	1	2	.....	1	.....	2	1	3	.....	.....	4	1	
7	4	.....	2	.....	2	1	1	.....	.....	3	.....	.....	2	1	2	1	166
9	4	2	4	1	1	5	.....	1	5	1	1	3	.....	1	1	1	
7	4	1	1	2	1	.....	1	2	1	3	1	1	2	2	.....	1	167
6	4	.....	.....	.....	1	.....	1	.....	3	1	1	1	.....	1	1	.....	
34	15	2	14	2	6	5	8	2	4	8	6	8	3	10	2	5	168
4	2	2	3	.....	2	1	.....	1	1	1	1	1	1	1	.....	1	
12	5	2	2	3	1	1	1	1	3	2	3	3	1	5	3	.....	169
5	3	.....	.....	1	.....	.....	.....	.....	.....	1	.....	4	2	.....	2	.....	
35	7	4	4	2	6	2	3	6	6	2	4	2	4	9	4	4	170
1	2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1	.....	
9	7	.....	2	.....	2	.....	1	1	2	2	1	4	1	.....	3	1	171
2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	1	.....	
1	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	172
3	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	1	.....	1	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	173
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	174
7	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	2	1	1	.....	.....	175
3	1	.....	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	176
12	2	1	1	.....	2	1	.....	.....	2	1	1	4	.....	1	2	2	177
11	2	.....	1	.....	1	.....	1	1	2	.....	.....	2	2	.....	4	1	
27	2	.....	3	.....	3	4	1	1	.....	2	1	4	6	3	5	2	178
10	1	.....	1	.....	1	2	.....	3	.....	.....	.....	2	4	.....	.....	.....	
51	4	1	3	3	4	5	6	8	4	5	3	6	5	8	4	4	179
71	3	4	3	.....	11	4	8	3	8	6	6	3	4	13	5	10	
11	1	.....	1	.....	.....	.....	2	.....	2	3	.....	.....	.....	2	.....	4	180
14	1	.....	.....	.....	.....	2	1	.....	.....	3	2	1	1	2	1	2	

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
180A. Overlaying	M	4	4												
180B. Asphyxia	M	9	5	2	1		1								
	F	15	13											2	
181. Accidental absorption of irrespirable or poisonous gas	M	27		2		1	2		1	4	9	2		6	
	F	14		2	1	1	1			2	2			5	
182. Accidental drowning	M	329	106	101	37	11	4	8	2	32	15	5		8	
	F	44	19	7	2	1	2		1	5	2			5	
183. Accidental traumatism by firearms	M	39	6	15	6			1	2	4	3			2	
	F	1								1					
184. Accidental traumatism by cutting or piercing instruments	M	6		2						1	1	2			
	F	1	1												
185. Accidental traumatism by fall	M	187	17	17	15	12	12		1	24	26	34		29	
	F	138	2	1	3	4	14		1	3	9	18		83	
186. Accidental traumatism in mines and quarries	M	68		6	13			2		37	8	1	1		
	F	1								1					
186A. Coal mines	M	1		1											
186B. Other mines	M	67		5	13			2		37	8	1	1		
	F	1								1					
187. Accidental traumatism by machines	M	51	3	5	5	2				16	15	2		3	
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	623	85	85	67	34	15	5	7	115	112	53	3	42	
	F	152	38	12	8	4	6		5	16	27	10		26	
188A. Railroad accidents	M	145	8	22	20	10	3	4	1	43	25	5	1	3	
	F	23	6	2	1				1	2	7	1		3	
188B. Street car accidents	M	14					2			1	4	5		2	
	F	5		2							1			2	
188C. Automobile accidents	M	318	65	43	29	11	7		6	43	52	34	1	27	
	F	119	31	7	7	4	6		4	14	18	8		20	
188D. Aeroplane and balloon accidents	M	6		2	3					1					
188E. Injuries by other vehicles	M	50	9	3	2	3	3				16	7		7	
	F	4	1	1							1	1			
188F. Other crushing	M	90	3	15	13	10		1		27	15	2	1	3	
	F	1												1	
189. Injuries by animals (poisoning excepted)	M	15	1	1	2		2			1	4	3		1	
192. Starvation (deprivation of food or water)	F	1				1									
193. Excessive cold	M	10		2		1	1	1		1	2	2			
	F	3								1				2	
194. Excessive heat	M	7	1	1						1	1	1		3	
	F	1												1	
195. Lightning	M	14	1	4	1			1		2	2	2		1	
	F	2	1	1											
196. Other accidental electric shocks	M	26	2	5	5					8	5			1	
	F	2								2					
197-199. Homicides	M	40	18	1	1	2	1	1		9	3	1	1	2	
	F	21	10	2					2	7					
197. Homicide by firearms	M	8		1						3	2	1		1	
	F	3								3					
198. Homicide by cutting or piercing instruments	M	3	1			1				1					
	F	1								1					
199. Homicide by other means	M	29	17		1	1	1	1		5	1		1	1	
	F	17	10	2					2	3					
201. Fracture (cause not specified)	M	60					10			2	2	22		24	
	F	131				1	17				1	25		87	
202. Other external violence (cause specified)	M	70	14	6	4	3	2	1	2	11	17	4		6	
	F	10	4				1			1	1	1		2	
203. External violence (cause not specified)	M	2								1				1	

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
4							1		1					1		1	180A
7	1		1				1		1	3				1		3	180B
14	1					2	1			3	2	1	1	2	1	2	
13	12		1	1			4	2	3	3	4	1	4		2	4	181
7	3		1	3	3		2	1	1					4	1	2	
208	31	38	33	19	12	3	8	14	34	37	78	68	15	16	26	18	182
37	5	2				2		3	3	1	19	8	4	1	1	2	
28	6	1	3	1	1	3	2	3	6	4	1		1	4	12	2	183
1							1										
3	2		1				1	1			1	1	2				184
1																1	
114	49	6	12	6	15	14	17	8	17	13	16	19	20	23	12	13	185
93	35	5	4	1	17	9	12	9	9	14	10	7	10	13	12	16	
21	9		36	2	1	41	2	5	4	3	2	2	2	4	1	1	186
1						1											
			1							1							186A
21	9		35	2	1	41	2	5	4	2	2	2	2	4	1	1	186B
1						1											
32	9		10		4	3	5	6	2	1	2	3	4	14	6	1	187
388	107	26	79	23	37	46	32	37	45	48	66	74	59	61	64	54	188
103	29	10	10		9	4	6	7	12	12	14	12	20	21	16	19	
76	26	12	22	9	11	12	7	13	13	8	17	14	10	14	16	10	188A
18	2		3		1		2		2	2	2		6	1	2	5	
8	5		1		1	1	1	1	1	1	1	2			1	4	188B
3			2		1			1					1	1	1		
226	44	13	28	7	11	13	11	17	22	29	35	37	39	35	37	32	188C
80	24	10	5		7	3	3	6	9	9	12	12	13	19	13	13	
1	4	1								1	1	1		1	1	1	188D
36	9		5		3	5	4	3	3	5	6	5	8	6	2		188E
2	2					1			1	1						1	
41	19		23	7	11	15	9	3	6	4	6	15	2	5	7	7	188F
	1						1										
12	2		1			3		2		1	2	1	2	2	2		189
1													1				192
5	2	1		2	1	3	1						1	1	1	2	193
2	1				1	1	1										
6			1									5	2				194
		1											1				
8	4		1	1						1	2	6	4	1			195
1		1											2				
12	8	4	2		4	2		1	2		3	6	1	7			196
1			1							1				1			
18	6		4	12	1	5	6	2	7		2	6	4	3	3	1	197–
10	3		3	5	1	3	4	1	1	2	2	2		2	2	1	199
5	3					1	1		2			3		1			197
2	1					1								1		1	
1	2				1				1		1						198
			1				1										
12	1		4	12		4	5	2	4		1	3	4	2	3	1	199
8	2		2	5	1	2	3	1	1	2	2	2		1	2		
46	8	2	2	2	9	6	5	4	5	2	6	3	4	5	6	5	201
84	39	5	2	1	7	15	10	8	7	13	13	8	13	7	11	19	
42	10	4	13	1	10	7	5	2	5	5	6	6	12	8	3	1	202
9	1						1	1			2	1	3	1	1		
1		1										1				1	203

TABLE 38—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS XV.—ILL-DEFINED DISEASES.															
Total		181	21	5	3	11	15	4	1	5	19	35	.....	62	.....
	M	106	11	1	3	8	7	3	.....	2	14	28	.....	29	.....
	F	75	10	4	.....	3	8	1	1	3	5	7	.....	33	.....
204, Sudden death	M	5	3	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
205. Cause of death not specified or ill-defined	M	101	8	1	3	7	7	3	.....	2	14	28	.....	28	.....
	F	74	10	4	.....	3	7	1	1	3	5	7	.....	33	.....
205A, Ill-defined	M	3	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
	F	4	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
205B. Not specified or unknown	M	24	7	1	2	3	1	3	.....	.....	3	2	.....	2	.....
	F	14	7	3	.....	.....	.....	1	.....	1	1	.....	.....	1	.....
205C. Heart failure	M	74	.....	.....	1	4	6	.....	.....	2	10	26	.....	25	.....
	F	55	.....	.....	.....	3	7	.....	1	2	4	7	.....	31	.....
205D. Syncope	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—ONTARIO, 1928.—Continued.

NATIVITY					MONTHS												
		Foreign															
Canada	British	USA	Other	Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
123	34	4	10	10	10	19	15	13	11	18	19	9	20	15	19	13	
65	23	3	8	7	7	12	8	5	6	10	11	6	16	10	9	6	
58	11	1	2	3	3	7	7	8	5	8	8	3	4	5	10	7	
4	1	.....	.....	.....	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	1	204
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
61	22	3	8	7	6	11	8	4	6	10	11	6	15	10	9	5	205
57	11	1	2	3	3	7	7	8	5	8	8	3	4	5	9	7	
2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1	205A
3	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1	1	.....	
17	.....	.....	2	5	2	4	3	.....	1	.....	3	1	6	3	1	.....	205B
13	.....	.....	.....	1	2	.....	.....	2	.....	2	1	2	1	2	1	1	
42	21	3	6	2	4	7	5	3	5	10	8	5	9	7	7	4	205C
40	10	1	2	2	1	6	6	6	4	6	7	1	3	2	7	6	
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	205D

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	No stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
DEATHS—ALL CAUSES. Total.		6,962	1,361	207	254	300	293	3	58	715	1,214	937	.....	1,620	...
	M	3,497	752	123	144	153	127	2	11	331	685	613	.....	556	...
	F	3,465	609	84	110	147	166	1	47	384	529	324	.....	1,064	...
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.															
Total		765	217	60	49	25	18	1	9	115	120	54	.....	97	...
	M	388	123	35	26	17	8	1	1	50	63	33	....	31	...
	F	377	94	25	23	8	10	.....	8	65	57	21	.....	66	...
1. Typhoid and paratyphoid fever	M	4	.....	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	...
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	...
1A. Typhoid fever	M	4	.....	2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	...
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	...
5. Malaria	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	...
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	...
7. Measles	M	14	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	3	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
8. Scarlet fever	M	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	3	2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	...
9. Whooping-cough	M	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	19	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
10. Diphtheria	M	23	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	27	25	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	...
11. Influenza	M	122	26	4	3	5	3	.....	1	13	28	19	.....	20	...
	F	159	14	6	7	5	8	.....	3	22	27	16	.....	51	...
11A. Influenza, sole cause	M	8	.....	.....	1	.....	.....	.....	.....	2	2	1	.....	3	...
	F	14	5	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	8	...
11B. Influenza, with phthisis	M	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	...
	F	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	...
11C. Influenza, with bronchitis	M	6	2	.....	.....	.....	1	.....	.....	1	.....	1	.....	1	...
	F	5	.....	.....	.....	.....	1	.....	.....	.....	1	2	.....	1	...
11D. Influenza, with pneumonia	M	70	19	3	3	3	.....	.....	.....	7	16	10	.....	9	...
	F	97	6	5	4	3	6	.....	2	15	20	8	.....	28	...
11F. Influenza, with diseases and accidents of pregnancy and parturition	F	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	...
11G. Influenza with other causes	M	36	5	1	.....	2	2	.....	1	2	9	7	.....	7	...
	F	39	3	.....	3	2	1	.....	1	4	6	6	.....	13	...
13. Mumps	F	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	...
16. Dysentery	M	4	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	...
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	...
21. Erysipelas	M	20	7	.....	.....	2	1	.....	.....	1	3	4	.....	2	...
	F	12	4	.....	1	.....	2	.....	.....	.....	2	3	.....	.....	...
22. Aucte anterior poliomyelitis	M	6	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
23. Lethargic encephalitis	M	7	2	1	1	.....	.....	.....	.....	.....	1	1	.....	1	...
	F	3	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	...
24. Meningococcus meningitis	M	5	3	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	...
	F	3	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	...
25. Other epidemic and endemic diseases	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
25A. Chicken-pox	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
25C. Others under this title	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
29. Tetanus	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	3	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	...
31-37. Tuberculosis. Total	M	125	13	23	18	6	2	1	.....	32	20	2	.....	8	...
	F	106	17	16	11	3	.....	.....	2	32	15	1	.....	7	...
31. Tuberculosis of the respiratory system	M	102	2	17	15	6	2	1	.....	30	19	2	.....	8	...
	F	80	5	14	9	1	.....	.....	1	30	12	1	.....	7	...
32. Tuberculosis of the meninges and central nervous system	M	8	5	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	10	8	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	...
33. Tuberculosis of the intestines and peritoneum	M	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	...
	F	6	1	.....	1	2	.....	.....	1	.....	1	.....	.....	.....	...
34. Tuberculosis of the vertebral column	M	5	2	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	...
35. Tuberculosis of the joints	M	2	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	...
	F	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	...

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
4,089	**2,227**	**202**	**368**	**76**	**577**	**538**	**605**	**618**	**626**	**614**	**475**	**467**	**545**	**560**	**543**	**794**	
1,995	1,119	102	225	56	284	271	290	337	319	299	229	247	268	292	297	364	
2,094	1,108	100	143	20	293	267	315	281	307	315	246	220	277	268	246	430	
481	213	17	47	7	49	55	55	64	76	76	33	33	56	54	45	169	
243	104	7	29	5	22	32	19	36	37	37	21	15	36	31	26	76	
238	109	10	18	2	27	23	36	28	39	39	12	18	20	23	19	93	
3	1					2						1				1	1
1														1			
3	1					2						1				1	1A
1														1			
1					1												5
		1											1				
14					1	1		1	2	2			1			6	7
3							2		1								
3									1	1						1	8
2	1							1								2	
10					1				1	1			3	3	1		9
19					1		1	3	2	2	2	1	2	1		4	
22				1		2	3	1	3	3	3	1		1	2	4	10
25	2				5	2	2	1		1	2	3	1	2	4	4	
73	39	1	8	1	7	10	5	5	8	11	4	3	6	6	10	47	11
85	59	6	8	1	5	12	13	10	13	18	3	3	2	6	7	67	
4	1		3				2	1					1		1	3	11A
9	4			1		1	4		1	2	1				2	3	
	1		1						1		1						11B
	2								1					1			
3	3				1	1		1								3	11C
2	3							2		2						1	
44	21	1	3	1	3	7		2	5	6	1	1	1	4	4	36	11D
54	33	5	5		4	7	6	5	7	8		2	1	4	3	50	
2								1								1	11F
22	13		1		3	2	3	1	2	5	2	2	4	2	5	5	11G
18	17	1	3		1	4	3	2	4	6	2	1	1	1	2	12	
2					1		1										13
3	1										1		2	1			16
1													1				
13	5	2			1	1	4	5	3	2				1	1	2	21
9	2		1		3		3	1	2	1			1			1	
6							1				1		2	1	1		22
4	1		2					2	1	1			1	1		1	23
2	1					1			2								
4	1							1	1			1			1	1	24
1	2				1				1	1							
2										1	1						25
2						1				1							
1										1							25A
2										1	1						25C
1						1											
1										1							29
2	1										2	1					
58	43	4	18	2	9	14	3	11	10	13	10	8	15	15	6	11	31–37
65	30	3	7	1	8	4	11	9	15	11	2	10	10	9	5	12	
42	39	3	16	2	8	11	3	7	7	10	10	8	13	9	6	10	31
47	26	2	5		5	3	5	7	11	6	1	9	10	8	4	11	
6	2							1	2	1				4			32
6	1		2	1	1		3		2	2				1		1	
1																	33
4	2						2	1		1		1		1			
3	1	1				1		1	1	1						1	34
2						1											35
1		1			1	1								1			

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
36. Tuberculosis of other organs	M	3	1		2										
	F	1								1					
36c. Tuberculosis of the lymphatic system (mesenteric and retroperitoneal glands excepted)	M	1	1												
	F	1								1					
36d. Tuberculosis of the genito-urinary system	M	2			2										
37. Disseminated tuberculosis	M	4	3	1											
	F	7	2	2	1						2				
37a. Disseminated tuberculosis, acute	M	2	2												
	F	4	1	1	1						1				
37b. Disseminated tuberculosis, chronis or unstated	M	2	1	1											
	F	3	1	1							1				
38. Syphilis	M	26	6	2	2	3	2			1	8	2			
	F	18	3		1				1	6	4			3	
40. Gonoccocus infection	F	2								2					
41. Purulent infection, septicaemia	M	15	6	2	1	1				1	2	2			
	F	12	2	2	2				1		1	1		3	
Class II.—General Diseases Not included in Class I.															
Total		1,092	57	15	27	70	42		6	112	342	165		256	
	M	464	30	9	14	24	18		1	47	158	93		70	
	F	628	27	6	13	46	24		5	65	184	72		186	
43-49. Cancer	M	329	1	3	6	16	17		1	27	123	78		57	
	F	432	6	2	7	31	22			33	132	55		144	
43. Cancer of the buccal cavity	M	29	1			1	3				14	4		6	
	F	4					1					1		2	
44. Cancer of the stomach and liver	M	100			3	6	5			6	36	21		23	
	F	108				4	7			5	31	18		43	
45. Cancer of the peritoneum, intestines and rectum	M	71		1		3	3			9	28	15		12	
	F	87			1	8	6			2	25	17		28	
46. Cancer of the female genital organs	F	84			4	6	2			11	28	5		28	
47. Cancer of the breast	F	85			1	11	4			7	30	9		23	
48. Cancer of the skin	M	6					1				2	3			
	F	5	1							1				3	
49. Cancer of other or unspecified organs	M	123		2	3	6	5		1	12	43	35		16	
	F	59	5	2	1	2	2			7	18	5		17	
49a. Cancer of the eye and ear	F	1												1	
49b. Cancer of the circulatory system	M	10			1				1	1	3	2		2	
	F	4	1								2			1	
49c. Cancer of the respiratory system	M	23			1	4				3	8	6		1	
	F	18	1		1		1			4	6			5	
49d. Cancer of the digestive system	M	13			1	1				1	6	3		1	
	F	10								1	6	2		1	
49e. Cancer of genito-urinary system	M	53				1	4			4	15	19		10	
	F	7	1				1					1		4	
49f. Cancer of bones and joints	M	8		1			1			1	1	3		1	
	F	6	1	1							1	1		2	
49g. Cancer of other specified organs	M	14		1						2	8	2		1	
	F	10	1	1		1				1	3	1		2	
49h. Generalized cancer	M	1									1				
	F	3				1				1				1	
491. Unspecified	M	1									1				

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1	1		1		1					1			1				36
1								1									
1										1							36C
1								1									
	1		1		1								1				36D
3			1			1		2					1				37
6	1				1		1		2	2	1						
2								1					1				37A
3	1								1	2	1						
1			1			1		1									37B
3					1		1		1								
15	9		1	1	2	2	2	8	2				4	1	3	2	38
11	6		1		2	2	1	1	3	1	1		1	3	2	1	
1	1									1			1				40
11	4						1	2	5	1	1	1	2	1	1		41
7	4		1		1	1	2	2		2				1	1	2	
568	425	34	60	5	99	95	90	95	92	101	81	98	70	94	81	96	
230	184	15	31	4	50	43	38	43	40	41	33	34	23	47	30	42	
338	241	19	29	1	49	52	52	52	52	60	48	64	47	47	51	54	
144	153	9	22	1	38	31	25	30	26	26	23	27	15	36	19	33	43–49
217	183	14	17	1	40	34	38	37	34	38	34	36	31	31	39	40	
16	10	1	2		2	5	3	2	2	4	1	3		4	2	1	43
2	2						2								2		
43	46	3	8		11	8	6	9	6	10	3	8	3	15	7	14	44
53	48	2	4	1	12	10	10	5	7	11	10	7	7	7	10	12	
36	30	2	3		8	10	6	10	4	8	6	6	2	3	2	6	45
52	31	1	3		8	12	7	9	7	6	4	6	4	9	6	9	
35	42	3	4		5	4	9	7	9	9	6	9	9	4	6	7	46
45	34	4	2		10	4	5	11	8	6	5	8	7	8	9	4	47
3	3				1						2	1	1			1	48
1	4						1		1		1	1		1			
46	63	3	9	1	16	8	10	9	14	4	11	9	9	14	8	11	49
29	22	4	4		5	4	4	5	2	6	8	5	4	2	6	8	
1												1					49A
4	3		3					1			3			3	1	2	49B
2	1	1			1	1				1				1			
4	16	1	1	1	3	2	1	1	2		2	3	3	2	3	1	49C
9	5	2	2		2	2	2	2		2	1	1	1	1		4	
7	6				3			3	2		1	1				3	49D
6	2		2		1		1				3	1	1		3		
21	29	1	2		3	5	7	1	8	4	3	3	5	8	3	3	49E
5	2							1		1		1	1		2	1	
4	3	1			3	1	1	1	1							1	49F
2	3	1							1	1	2					2	
6	5		3		3		1	2	1		1	2	1	1	1	1	49G
2	8				1	1	1	1	1	1	1		1		1	1	
	1				1												49H
2	1							1			1	1					
	1										1						49I

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	4				1				1	2				
	F	7				1					3	1		2	
51. Acute rheumatic fever	M	10	6	2						2					
	F	17	3	1	1	1			3	6				2	
53. Scurvy	M	1	1												
54. Pellagra	F	1								1					
56. Rickets	M	5	5												
	F	2	2												
57. Diabetes mellitus	M	30	3		3	1	1				10	4		8	
	F	53	2		2	4	1			2	15	7		20	
58. Anaemia, chlorosis	M	19		1		2				2	7	6		1	
	F	29		2		3				3	8	7		6	
58A. Pernicious anaemia	M	16				2				1	7	5		1	
	F	28		1		3				3	8	7		6	
58B. Other anaemias and chlorosis	M	3		1						1		1			
	F	1		1											
59. Diseases of the pituitary gland	M	2		1	1										
60. Diseases of the thyroid gland	M	6			1	1					4				
	F	60		1	3	5	1		1	16	20	2		11	
60A. Exophthalmic goiter	M	2									2				
	F	33				3	1		1	6	13	1		8	
60B. Other diseases of the thyroid glands	M	4			1	1					2				
	F	27		1	3	2				10	7	1		3	
61. Diseases of the parathyroid gland	M	2	2												
62. Diseases of the thymus	M	8	8												
	F	7	7												
63. Diseases of the adrenals (Addison's disease)	M	2									1	1			
	F	1									1				
64. Diseases of the spleen	M	3		1						2					
	F	3	1							1	1				
65. Leukaemia, lymphadenoma	M	18	1	1						7	5	2		2	
	F	7	2			1			1	2	1				
65A. Leukaemia	M	8	1	1						3	1	1		1	
	F	5	2			1			1		1				
65B. Lymphadenoma (Hodgkin's disease	M	10								4	4	1		1	
	F	2								2					
66. Alcoholism	M	18			3	3				5	4	2		1	
	F	3									2			1	
66A. Delirium tremens	M	2				1					1				
66B. Acute alcholism	M	13			3	1				4	2	2		1	
	F	3									2			1	
66C. Chronic alcoholism	M	3				1				1	1				
67. Chronic poisoning by mineral substances	M	1												1	
67B. Others under this title	M	1												1	
68. Chronic organic poisoning	F	2								1	1				
68A. Chronic morphinism	F	1									1				
68C. Other organic poisoning	F	1								1					
69. Other general diseases	M	6	3							1	2				
	F	4	4												
69B. Haemophilia	M	2	2												
	F	1	1												
69C. Purpura haemorrhagica	M	1									1				
	F	1	1												
69D. Others under this title	M	3	1							1	1				
	F	2	2												
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE,															
Total		539	75	16	25	34	25			42	96	76		150	
	M	268	42	8	19	18	9			24	52	45		51	
	F	271	33	8	6	16	16			18	44	31		99	
70. Encephalitis	M	9	3	1	2	1				1	1				
	F	8	4							3				1	

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
2	1		1						1	1		1				1	50
2	4		1			2	1		2		1			1			
7	2	1					2	1	1	2		1		2	1		51
7	8		2		2		1	2	1	2	2	2		1	3	1	
1									1								53
1									1								54
5					1			1				2	1				56
2								1							1		
18	8	3	1		3	6	3	4	1	3	4	1	2	1	1	1	57
26	19		8		1	4	5	3	5	5	4	8	4	4	4	6	
12	7				5	4	1	2	2	1	2				1	1	58
16	10	3			2	5	2	2	3	2	3	2	3	2	2	1	
10	6				3	4	1	2	1	1	2				1	1	58A
15	10	3			2	5	2	2	3	2	3	1	3	2	2	1	
2	1				2				1								58B
1												1					
1	1						1							1			59
5				1			1	1		2	1			1			60
45	14	1			2	4	3	5	5	10	2	11	6	6	2	4	
2												1			1		60A
23	9	1			1	3	2	1	4	5	2	4	4	5		2	
3				1			1	1		2							60B
22	5				1	1	1	4	1	5		7	2	1	2	2	
2							2										61
8								1	2	1		1			1	2	62
7							1			1	1	2		1		1	
1			1						1					1			63
		1				1											
1			2						1	2							64
3						1			1			1					
9	6	1	1	1		1	2	1	2	2	2		1	1	4	2	65
5	1		1		1					1		1	2	1		1	
4	1	1	1	1			1	1	1	1	2			1	1		65A
4			1		1					1		1	1	1			
5	5					1	1		1	1			1		3	2	65B
1	1												1			1	
9	5	1	2	1	3	1		1		1	1	1	4	2	3	1	66
1	2				1						1	1					
		1		1									1		1		66A
8	4		1		3	1		1		1	1	1	1	2	1	1	66B
1	2				1						1	1					
1	1		1										2		1		66B
	1													1			67
	1													1			67B
2						1	1										68
1							1										68A
1						1											68C
5			1				1	1	2					1			69
4								2		1			1				
2							1		1								69B
1										1							
1																1	69C
1													1				
2			1					1	1					1			69D
2								2									
326	167	9	35	2	47	43	39	51	51	47	38	37	37	43	51	55	
158	78	6	25	1	20	16	23	23	25	20	16	19	20	26	28	32	
168	89	3	10	1	27	27	16	28	26	27	22	18	17	17	23	23	
6	2		1		1	1	1	1	1		1	1	1		1		70
4	4				1		1		1		1				1	3	

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
70A. Abscess of brain	M	3	1	1	1										
	F	3	2							1					
70B. Encephalitis	M	6	2		1	1				1	1				
	F	5	2							2				1	
71. Meningitis	M	13	9							2	1	1			
	F	4	3	1											
71A. Simple meningitis	M	13	9							2	1	1			
	F	4	3	1											
72. Tabes dorsalis (locomotor ataxia)	M	16			1	2				1	7	2		3	
	F	3				1					1			1	
73. Other diseases of the spinal cord	M	35		3	3	1	3			5	9	8		3	
	F	19	2			1	1			1	3	1		10	
74. Cerebral haemorrhage, apoplexy	M	89		1		6	4			6	19	26		27	
	F	135			2	7	12			5	26	24		59	
74A. Apoplexy	M	27				2	2			4	4	5		10	
	F	33				1	2				8	5		17	
74B. Cerebral haemorrhage	M	54		1		3	1			2	13	20		14	
	F	82			2	4	8			3	15	17		33	
74C. Cerebral thrombosis and embolism	M	8				1	1				2	1		3	
	F	20				2	2			2	3	2		9	
75. Paralysis without specified cause	M	14			2	1				1	1	4		5	
	F	23				3	1			1	3	2		13	
75A. Hemiplegia	M	9				1					1	4		3	
	F	18				3	1			1	1	2		10	
75B. Others under this title	M	5			2					1				2	
	F	5									2			3	
76. General paralysis of the insane	M	10			1	2				2	2			3	
	F	2					1							1	
77. Other forms of mental alienation	M	6			2	1	2							1	
	F	11		1	1	3				1	1	1		3	
78. Epilepsy	M	9	1		5						1			2	
	F	10		1	1	1				2	4			1	
80. Infantile convulsions (under 5 years of age)	M	7	7												
	F	1	1												
81. Chorea	F	1		1											
82. Neuralgia and neuritis	M	1												1	
	F	1	1												
83. Softening of the brain	F	3												3	
84. Other diseases of the nervous system	M	29	2		3	4				4	8	3		5	
	F	27	6	2	2		1			2	6	2		6	
85. Diseases of the eye and annexa	M	2										1		1	
86. Diseases of the ear and of the mastoid process	M	28	20	3						2	3				
	F	23	16	2						3		1		1	
86A. Diseases of the ear	M	18	14	1						1	2				
	F	12	9	1								1		1	
86B. Diseases of the mastoid process	M	10	6	2						1	1				
	F	11	7	1						3					
CLASS IV.—DISEASES OF THE CIRCULATORY SCHOOL															
Total		1,617	14	24	35	64	117		6	90	267	381		619	
	M	808	7	12	21	35	47		2	51	158	260		215	
	F	809	7	12	14	29	70		4	39	109	121		404	
87-90. Diseases of the heart	M	483	7	11	19	20	26		2	45	97	137		119	
	F	475	7	12	14	16	30		4	34	66	71		221	
87. Pericarditis	M	1		1											
	F	2									1			1	
88. Endocarditis and myocarditis (acute)	M	20	1	2	5					9	1			2	
	F	23	2	4	2		1		1	7	1	1		4	
88A. Acute endocarditis	M	13		2	4					6				1	
	F	15	2	3	1		1		1	5	1			1	

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
3	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	70A
2	1	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	1	
3	2	.....	1	.....	1	1	.....	.....	1	.....	1	1	.....	.....	1	.....	70B
2	3	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	2	
11	1	.....	1	.....	2	.....	2	1	1	.....	.....	1	2	1	2	1	71
4	.....	.....	.....	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	.....	.....	
11	1	.....	1	.....	2	.....	2	1	1	.....	.....	1	2	1	2	1	71A
4	.....	.....	.....	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	.....	.....	
12	3	.....	1	.....	2	.....	2	2	2	2	2	.....	.....	2	.....	2	72
1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	
14	18	.....	2	1	2	3	3	3	1	2	2	3	5	4	2	5	73
14	4	.....	1	.....	1	.....	.....	1	2	3	2	4	1	1	3	1	
40	37	4	8	.....	3	7	4	9	9	8	8	8	4	6	8	15	74
80	47	2	6	....	10	17	10	18	16	12	8	5	10	6	10	13	
18	7	2	.....	.....	1	3	2	1	5	2	4	4	.....	.....	3	2	74A
20	12	.....	1	.....	1	4	4	7	2	3	2	1	1	2	4	2	
18	27	2	7	.....	2	3	2	7	4	5	3	4	3	6	5	10	74B
48	27	2	5	.....	8	6	5	10	14	8	5	4	9	3	4	6	
4	3	.....	1	.....	.....	1	.....	1	.....	1	1	.....	1	.....	.....	3	74C
12	8	.....	.....	.....	1	7	1	1	.....	1	1	.....	.....	1	2	5	
6	6	.....	2	.....	4	...	1	1	1	.....	1	1	1	.....	1	3	75
12	9	1	1	.....	3	.....	. .	2	1	4	3	5	1	.....	4	. . .	
4	4	.....	1	.....	2	.....	1	1	1	.....	1	1	1	.....	.....	1	75A
10	7	1	.....	.....	2	.....	.....	1	1	4	3	4	1	.....	2	.....	
2	2	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	75B
2	2	.....	1	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	2	.....	
4	2	1	3	.....	1	.....	1	1	.....	1	.....	.....	1	3	1	1	76
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	
5	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	3	1	77
4	7	.....	.....	.....	.....	2	.....	1	1	1	1	1	.....	1	1	2	
6	1	1	1	.....	.....	.....	1	.....	2	1	1	1	.....	3	.....	.....	78
4	5	.....	1	.....	3	1	1	.....	.....	2	1	.....	2	.....	.....	.....	
7	.....	.....	.....	.....	1	.....	1	1	2	1	.....	.....	.....	1	.....	.....	80
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	81
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	82
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
2	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	83
21	5	.....	3	.....	3	.....	2	1	3	2	1	2	4	5	5	1	84
19	6	.....	1	1	2	3	.....	3	3	2	2	2	3	5	1	1	
2	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	85
23	2	.....	3	.....	1	3	5	3	2	3	.....	2	2	.....	4	3	86
20	3	.....	.....	.....	5	2	4	3	1	1	2	.....	.....	1	3	1	
15	1	.....	2	.....	1	1	5	.....	1	1	.....	1	2	.....	4	2	86A
11	1	.....	.....	.....	2	2	1	2	.....	.....	1	.....	.....	1	2	1	
8	1	.....	1	.....	.....	2	.....	3	1	2	.....	1	.....	.....	.....	1	86B
9	2	.....	.....	.....	3	.....	3	1	1	1	1	.....	.....	.....	1	.....	
828	640	58	73	18	149	138	144	152	147	144	127	104	120	114	123	155	
389	340	29	39	11	67	78	64	81	75	74	56	56	58	57	72	70	
439	300	29	34	7	82	60	80	71	72	70	71	48	62	57	51	85	
230	204	20	23	6	45	50	37	35	49	40	29	33	36	36	46	47	87–90
262	175	14	19	5	52	36	44	43	49	37	37	25	33	33	29	57	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	87
.....	1	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	
12	4	.....	4	.....	2	1	1	3	.....	3	.....	1	3	2	2	2	88
13	6	2	2	.....	2	1	3	.....	5	3	.....	2	4	2	.....	1	
8	2	.....	3	.....	1	.....	1	1	.....	3	.....	1	3	.....	2	1	88A
9	3	1	2	.....	1	1	2	.....	3	2	.....	1	2	2	.....	1	

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
88B. Acute myocarditis	M	7	1		1					3	1			1	
	F	8		1	1					2		1		3	
89. Angina pectoris	M	84				1	3			6	24	33		17	
	F	46			1	2	4			1	7	13		18	
90. Other diseases of the heart	M	378	6	8	14	19	23		2	30	72	104		100	
	F	404	5	8	11	14	25		3	26	57	57		198	
90A. Valvular disease	M	68	2	4	3	2	4		1	13	15	16		8	
	F	78		2	3	4	4		1	10	10	9		35	
90B. Fatty degeneration of the heart	F	3												3	
90D. Chronic endocarditis	M	45		3	3	3	1			7	11	12		5	
	F	78	2	4	3	3	3		1	7	17	9		29	
90E. Chronic myocarditis	M	231	4	1	8	13	17		1	8	37	62		80	
	F	204	3	1	5	7	14		1	9	24	32		108	
90F. Others under this title	M	34				1	1			2	9	14		7	
	F	41		1			4				6	7		23	
91. Diseases of the arteries	M	312		1	1	14	20			5	57	119		95	
	F	321				13	40			4	39	46		179	
91A. Aneurysm	M	7		1		2					3	1			
	F	5				1					3			1	
91B. Arteriosclerosis	M	301			1	12	19			4	53	117		95	
	F	314				12	40			4	36	46		176	
91C. Other diseases of the arteries	M	4					1			1	1	1			
	F	2												2	
92. Embolism and thrombosis (not cerebral)	M	9			1	1	1				2	4			
	F	7								1	1	2		3	
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	M	3								1	1			1	
	F	5									2	2		1	
94. Diseases of the lymphatic system (lymphangitis, etc.)	M	1									1				
	F	1									1				
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.															
Total		768	188	22	41	42	29		6	73	108	84		175	
	M	405	100	14	27	20	11		2	45	73	53		60	
	F	363	88	8	14	22	18		4	28	35	31		115	
97. Diseases of the nasal fossae and their annexa	M	2		1										1	
	F	4	1	1	1						1				
98. Diseases of the larynx	M	4	2	1		1									
	F	4	3											1	
98A. Laryngismus stridulus	F	1	1												
98B. Laryngitis	M	4	2	1		1									
	F	3	2											1	
99. Bronchitis	M	6	3									1		2	
	F	12	5				1				1	2		3	
99A. Bronchitis, acute	M	4	3											1	
	F	8	5								1			2	
99B. Bronchitis, chronic	M	2										1		1	
	F	1					1								
99D. Bron hitis, not otherwise defined, 5 years or over	F	3										2		1	
100. Broncho-pneumonia (including capillary bronchitis)	M	150	68	2	8	3	6		1	8	15	19		20	
	F	143	51	2	5	4	7		1	13	11	7		42	
100A. Broncho-pneumonia	M	150	68	2	8	3	6		1	8	15	19		20	
	F	142	51	2	5	4	7		1	13	11	7		41	
100B. Capillary bronchitis	F	1												1	
101. Pneumonia	M	196	18	7	15	14	5		1	27	50	26		33	
	F	174	27	4	6	15	9		3	15	17	19		59	
101A. Pneumonia, lobar	M	141	9	6	13	10	4		1	22	34	21		21	
	F	100	13	2	2	9	4		3	13	11	12		31	
101B. Pneumonia, not otherwise defined	M	55	9	1	2	4	1			5	16	5		12	
	F	74	14	2	4	6	5			2	6	7		28	
102. Pleurisy	M	19	5	2	2	2				5	1	1		1	
	F	10	1		2	1	1				2			3	

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NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
4	2	.....	1	.....	1	1	.....	2	.....	.....	.....	.....	.....	2	.....	1	88B
4	3	1	.....	.....	1	.....	1	.....	2	1	.....	1	2	.....	.....	.....	
43	30	7	4	.....	9	7	10	11	5	4	6	4	5	8	8	7	89
27	15	2	1	1	2	2	8	2	7	2	1	2	5	2	4	9	
175	169	13	15	6	34	42	26	21	44	33	23	27	28	26	36	38	90
222	153	9	16	4	47	33	33	41	37	31	36	21	24	29	25	47	
35	26	2	5	.....	5	9	3	6	9	4	5	5	3	3	10	6	90A
48	22	3	4	1	7	7	10	13	7	4	6	2	6	4	3	9	
2	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	90B
16	22	1	6	.....	1	8	2	.....	7	5	3	.....	4	2	3	10	90D
47	26	2	1	2	6	3	9	6	9	8	8	10	5	5	4	5	
110	102	9	4	6	23	20	19	15	24	23	14	20	21	15	19	18	90E
104	87	4	9	.....	31	19	9	18	13	16	21	4	11	19	16	27	
14	19	1	.....	.....	5	5	2	.....	4	1	1	2	.....	6	4	4	90F
21	17	.....	2	1	3	3	5	4	8	3	1	3	2	1	2	6	
152	132	9	14	5	22	26	27	44	26	33	27	22	20	21	24	20	91
170	121	14	14	2	29	23	36	27	22	32	33	23	28	21	22	25	
2	5	.....	.....	.....	.....	.....	1	1	1	2	.....	.....	.....	1	.....	1	91A
1	2	2	.....	.....	.....	.....	1	.....	.....	1	1	2	.....	.....	.....	.....	
150	125	9	12	5	21	26	25	43	24	30	27	22	20	20	24	19	91B
167	119	12	14	2	29	23	34	26	22	31	32	21	28	21	22	25	
.....	2	.....	2	.....	1	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	91C
2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	
5	4	.....	.....	.....	.....	2	.....	2	.....	1	.....	1	1	.....	2	.....	92
5	2	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....	1	2	.....	1	
2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2	93
2	2	.....	1	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	2	
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	94
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	
451	247	21	39	10	71	76	84	83	70	68	29	21	33	40	55	138	
228	129	12	27	9	38	34	44	47	40	41	17	18	15	22	28	61	
223	118	9	12	1	33	42	40	36	30	27	12	3	18	18	27	77	
1	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	97
3	1	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	1	.....	.....	.....	
3	1	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	1	.....	98
3	1	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98A
3	1	.....	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	1	.....	98B
2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	
3	2	.....	1	.....	1	.....	1	1	.....	.....	.....	1	.....	1	1	.....	99
6	5	.....	1	.....	1	1	1	2	1	1	.....	.....	2	.....	1	2	
3	1	.....	.....	.....	1	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	99A
5	2	.....	1	.....	1	1	.....	1	1	1	.....	.....	2	.....	.....	1	
.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	99BS
.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1	99D
98	40	4	7	1	11	9	13	15	18	12	4	8	7	8	8	37	100
89	48	2	3	1	8	22	13	14	12	11	2	.....	6	7	11	37	
98	40	4	7	1	11	9	13	15	18	12	4	8	7	8	8	37	100A
89	47	2	3	1	8	22	13	14	11	11	2	.....	6	7	11	37	
.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	100B
104	65	7	13	7	24	19	25	27	17	18	10	5	6	9	15	21	101
113	50	6	5	.....	22	16	19	20	15	13	6	3	6	9	13	32	
74	46	5	9	7	14	15	22	21	12	13	7	4	3	9	10	11	101A
63	30	4	3	.....	16	10	8	12	7	11	3	1	4	6	9	13	
30	19	2	4	.....	10	4	3	6	5	5	3	1	3	.....	5	10	101B
50	20	2	2	.....	6	6	11	8	8	2	3	2	2	3	4	19	
10	8	.....	1	.....	2	3	2	.....	.....	5	.....	2	1	1	2	1	102
5	5	.....	.....	.....	.....	1	3	.....	1	.....	2	.....	1	1	.....	1	

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
103. Congestion and haemorrhagic infarct of the lung	M	1												1	
	F	8				1						2		5	
104. Gangrene of the lung	M	1								1					
	F	1									1				
105. Asthma	M	10		1	1					1	3	3		1	
	F	4				1					1			2	
106. Pulmonary emphysema	M	2								1		1			
107. Other diseases of the respiratory system (tuberculosis excepted)	M	14	4		1					2	4	2		1	
	F	3		1							1	1			
107A. Chronic interstitial pneumonia including occupational diseases of the lungs	M	2									1	1			
107C. Others under this title	M	12	4		1					2	3	1		1	
	F	3		1							1	1			
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.															
Total		566	199	19	31	23	10		2	70	98	43		71	
		300	105	12	13	13	5		1	41	60	28		22	
	F	266	94	7	18	10	5		1	29	38	15		49	
108. Diseases of the mouth and annexa	M	1			1										
	F	5	2				1			1	1				
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	19	17							1				1	
	F	20	17		2					1					
109B. Pharynx and tonsils	M	19	17							1				1	
	F	20	17		2					1					
111. Ulcer of the stomach and duodenum	M	53		2	2	4				13	24	3		5	
	F	8				2				1	2	1		2	
111A. Ulcer of the stomach	M	26		1	1	2				6	11	2		3	
	F	4				1					2			1	
111B. Ulcer of the duodenum	M	27		1	1	2				7	13	1		2	
	F	4				1				1		1		1	
112. Other diseases of the stomach (cancer excepted)	M	8	2			1				2	1	1		1	
	F	8	1							2	1			4	
113. Diarrhoea and enteritis (under 2 years of age)	M	61	61												
	F	59	59												
114. Diarrhoea and enteritis (2 years or over)	M	9	2		1					3	1	1		1	
	F	16	6		3		2			1	1			3	
117. Appendicitis and typhlitis	M	64	14	7	3	1	1		1	16	12	6		3	
	F	45	3	6	5	2			1	9	11	1		7	
118. Hernia, intestinal obstruction	M	27	5	1	3	2	1			1	4	4		6	
	F	41	3	1	3	2	1			6	6	6		13	
118A. Hernia	M	10	1		2	1					2	1		3	
	F	13					1			3	2	1		6	
118B. Intestinal obstruction	M	17	4	1	1	1				1	2	3		3	
	F	28	3	1	3	2				3	4	5		7	
119. Other diseases of the intines	M	9	1			1					2	3		2	
	F	11	1			1				3	3			3	
120. Acute yellow atrophy of the liver	M	1									1				
	F	1			1										
122. Cirrhosis of the liver	M	18			1	3	2			2	5	4		1	
	F	7			1						2			4	
122A. Specified as alcoholic	M	2								1	1				
	F	1			1										
122B. Not specified as alcoholic	M	16			1	3	2			1	4	4		1	
	F	6									2			4	
123. Biliary calculi	M	4					1				2	1			
	F	5			1						1	1		2	
124. Other diseases of the liver	M	15			1					2	6	4		2	
	F	34	1		2	3	1			3	8	6		10	

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1									1								103
2	5	1			1	1	2		1		1			1		1	
			1									1					104
			1												1		
4	5	1						3		3	2		1	1			105
2	1		1							2			1		1		
	1		1			1						1					106
4	6		3	1		2	1		2	3	1			2	1	2	107
	2		1										1			2	
1	1						1									1	107A
3	5		3	1		2			2	3	1			2	1	1	107C
	2		1										1			2	
360	154	18	31	3	35	31	44	37	51	46	46	52	85	57	32	50	
187	82	6	23	2	18	13	23	22	29	22	22	32	46	27	16	30	
173	72	12	8	1	17	18	21	15	22	42	24	20	39	30	16	20	
			1				1										108
3	2				1			2				1	1				
17	2				4	1	2	1	3	3	2		1			2	109
19	1				2	1	2	1	2	3	2	1		2	2	2	
17	2				4	1	2	1	3	3	2		1			2	109B
19	1				2	1	2	1	2	3	2	1		2	2	2	
18	28	1	6		4	4	4	6	4	3	6	2	7	5	3	5	111
5	2	1			1	1			1	1	1	1	1			1	
6	16	1	3		1	2	3	3	3	1	2	1	4	2	2	2	111A
2	1	1			1					1	1	1					
12	12		3		3	2	1	3	1	2	4	1	3	3	1	3	111B
3	1					1			1				1			1	
4	3	1				1		1		1		2		2	1		112
4	4					1		4		1	2						
61							3		1	2	4	7	22	11	4	7	113
58		1			1	1	3		2	4	1	6	21	14	5	1	
4	2	1	2		2						1	1	1	2		2	114
10	4	1	1			2		1		3	2		5	2		1	
37	22	1	4		3	5	4	6	9	7	5	10	7	2	3	3	117
23	16	3	3		4	6	4	1	4	6	5	3	4	2	4	2	
17	7	1	2		2		6	2	3	2		5	5			2	118
18	20	3			3	3	2	1	7	3	5	5	2	3	2	5	
6	4				1		3	1	1			1	3				118A
2	9	2			1	2			2		2	1		1		4	
11	3	1	2		1		3	1	2	2		4	2			2	118B
16	11	1			2	1	2	1	5	3	3	4	2	2	2	1	
8	1				1			3		1	1	1				2	119
7	3		1		1		2	1	1		1	2		2		1	
	1											1					102
	1						1										
7	4		5	2	1	1		1	2		1	1	2	3	3	3	122
6	1					1	1	1	1	1	1			1			
1	1					1								1			122A
1									1								
6	3		5	2	1			1	2		1	1	2	2	3	3	122B
5	1					1	1	1		1	1			1			
1	3				1					1	1	1					123
3	1		1		1		1								1	2	
5	6	1	3			1	2	1	5	2			1	1	2		124
13	16	2	2	1	1	2	4	3	3	2	4	1	4	3	2	5	

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION											
			Under 15	Single 15–24	Single 25–44	Single 45–64	Single 65 and over	Single Age not stated	Married 15–24	Married 25–44	Married 45–64	Married 65 and over	Married Age not stated	Widowed	Not stated
125. Diseases of the pancreas.	M	3	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	2	2	.....	.....	1	.....
126. Peritonitis without specified cause	M	8	3	2	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.															
Total		461	16	8	12	24	18	.....	2	61	119	85	.....	116	.....
	M	262	8	6	3	13	12	.....	.....	24	72	67	.....	57	.....
	F	199	8	2	9	11	6	.....	2	37	47	18	.....	59	.....
128. Acute nephritis (including unspecified, under 10 years of age)	M	14	5	3	1	.....	.....	.....	.....	3	.....	2	.....	.....	.....
	F	10	1	.....	1	1	.....	.....	.....	2	1	1	.....	3	.....
129. Chronic nephritis (Bright's disease)	M	151	1	2	1	4	6	.....	.....	20	59	33	.....	25	.....
	F	127	1	2	3	7	6	.....	1	17	34	12	.....	44	.....
131. Other diseases of the kidneys and annexa	M	16	1	1	.....	3	.....	.....	.....	.....	5	3	.....	3	.....
	F	22	6	.....	2	.....	.....	.....	1	3	4	2	.....	4	.....
132. Calculi of the urinary passages	M	5	1	.....	.....	.....	.....	.....	.....	1	2	.....	.....	1	.....
	F	4	.....	.....	.....	.....	.....	.....	.....	3	.....	1	.....	.....	.....
133. Diseases of the bladder	M	9	.....	.....	1	1	1	.....	.....	.....	1	2	.....	3	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....
134. Diseases of the urethra, urinary abscess, etc.	M	5	.....	.....	.....	2	1	.....	.....	.....	2	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
134A. Stricture of the urethra.	M	3	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....
134B. Other diseases of the urethra	M	2	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
135. Diseases of the prostate	M	62	.....	.....	.....	3	4	.....	.....	.....	3	27	.....	25	.....
137. Cysts and other benign tumours of the ovary	F	5	.....	.....	.....	1	.....	.....	.....	.....	2	1	.....	1	.....
138. Salpingitis and pelvic abscess	F	4	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	1	.....
139. Benign tumours of the uterus	F	10	.....	.....	3	1	.....	.....	.....	3	.....	.....	.....	3	.....
140. Non-puerperal uterine haemorrhage	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
141. Other diseases of the female genital organs	F	12	.....	.....	.....	1	.....	.....	.....	6	4	.....	.....	1	.....
CLASS VIII.—THE PUERPERAL STATE.															
Total		111	.....	7	4	.....	.....	.....	21	75	3	.....	.....	1	.....
143. Accidents of pregnancy	F	11	.....	1	.....	.....	.....	.....	2	6	2	.....	.....	.....	.....
143A. Abortion	F	3	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....
143B. Ectopic gestation	F	5	.....	.....	.....	.....	.....	.....	1	4	.....	.....	.....	.....	.....
143C. Others under this title	F	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
143D. Abortion, self-induced	F	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
144. Puerperal haemorrhage	F	13	.....	.....	1	.....	.....	.....	1	11	.....	.....	.....	.....	.....
145. Other accidents of labour	F	17	.....	1	.....	.....	.....	.....	2	14	.....	.....	.....	.....	.....
145A. Caesarean section	F	6	.....	.....	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....
145B. Difficult labour	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
145C. Other surgical operations and instrumental delivery	F	3	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....
145D. Uncontrollable vomiting	F	7	.....	1	.....	.....	.....	.....	1	5	.....	.....	.....	.....	.....
146. Puerperal septicaemia	F	44	.....	3	2	.....	.....	.....	11	26	1	.....	.....	1	.....
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	6	.....	.....	.....	.....	.....	.....	1	5	.....	.....	.....	.....	.....
148. Puerperal albuminuria and convulsions	F	19	.....	2	1	.....	.....	.....	4	12	.....	.....	.....	.....	.....
149. Following childbirth (not otherwise defined)	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
2	1						1		1			1					125
3	1	1			2				1				1	1			
6	2							1	1			1		1		4	126
1							1										
238	172	16	30	5	32	33	38	55	45	33	31	30	45	42	37	40	
126	102	9	20	5	22	22	19	40	25	17	15	19	21	21	21	20	
112	70	7	10		10	11	19	15	20	16	16	11	24	21	16	20	
9	3		2		2	2	2	1			1		1	2	1	2	128
7	3				2		1		1	1				2	1	2	
71	58	7	12	3	13	10	12	18	18	10	8	10	11	11	16	14	129
68	45	6	8		7	11	7	12	14	15	10	8	14	9	8	12	
6	6		3	1	1	1	1	3	1	3		3	2			1	131
15	7						3				2	2	4	5	3	3	
3	2						1	2						1		1	132
3		1											1	1	1	1	
2	7					2	1	2	1	1				1	1		133
	3													1	1	1	
	3	1		1				1			1		1	1		1	134
1															1		
	1	1		1							1		1	1			134A
	2							1								1	134B
1															1		
35	23	1	3		6	7	2	13	5	3	5	6	6	5	3	1	135
3	2				1		1		1		1			1			137
4							1						2	1			138
7	3						4	1	1		2	1	1				139
	1												1				140
4	6		2				2	2	3		1		1	1	1	1	141
55	44	3	9		10	9	14	10	9	15	8	7	9	6	4	10	
4	4		3				1	1	1	2	2			1		3	143
1	1		1				1			1						1	143A
3			2					1		1	1			1		1	143B
	2										1					1	143C
	1								1								143D
5	5		3		2	1	2	1	1	2		2	1			1	144
10	5		2		2	3	1	1		2	1	4	3				145
3	3				1			1		1	1	1	1				145A
1						1											145B
2	1					1				1		1					145C
4	1		2		1	1	1					2	2				145D
22	19	2	1		3	4	8	4	6	5	2	1	2	3	2	4	146
4	1	1			1			1	1	1	1				1		147
9	10				2	1	2	2		3	2		2	2	1	2	148
1													1				149

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.															
Total		33	7	2	.....	.....	2	.....	.....	5	4	4	.....	9	.....
	M	17	3	2	.....	.....	1	.....	.....	1	3	4	.....	3	.....
	F	16	4	.....	.....	.....	1	.....	.....	4	1	.....	.....	6	.....
151. Gangrene	M	4	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
	F	5	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	3	.....
152. Furuncle	M	5	.....	.....	.....	.....	1	.....	.....	.....	2	2	.....	.....	.....
	F	3	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
153. Acute abscess	M	7	2	1	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....
	F	4	2	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
154. Other diseases of the skin and annexa	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	.....
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.															
Total		24	10	5	1	.....	1	.....	.....	2	2	1	.....	2	.....
	M	15	5	4	.....	.....	1	.....	.....	1	2	1	.....	1	.....
	F	9	5	1	1	.....	.....	.....	.....	1	.....	.....	.....	1	.....
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	10	5	1	.....	.....	1	.....	.....	.....	1	1	.....	1	.....
	F	6	3	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
156. Diseases of the joints (tuberculosis and rheumatism excepted)	M	4	.....	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
158. Other diseases of the organs of locomotion	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
CLASS XI.—MALFORMATIONS															
Total		93	88	2	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....
	M	47	45	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	46	43	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....
159. Congenital malformations (still-births not included)	M	47	45	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	46	43	1	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....
159A. Congenital hydrocephalus	M	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	5	4	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
159B. Congenital malformations of the heart	M	20	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	18	17	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
159C. Others under this title	M	24	23	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	23	22	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
CLESS XII.—DISEASES OF EARLY INFANCY.															
Total		410	410	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	M	229	229	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	181	181	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
160. Congenital debility, icterus and sclerema	M	28	28	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	14	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
161. Premature birth, injury at birth	M	181	181	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	145	145	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
161A. Premature birth	M	152	152	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	127	127	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
19	10	1	3	.....	.....	2	4	4	5	1	3	4	.....	3	4	3	
10	4	1	2	.....	.....	1	3	2	3	.....	1	2	.....	2	2	1	
9	6	.....	1	.....	.....	1	1	2	2	1	2	2	.....	1	2	2	
2	2	.....	.....	.....	.....	1	1	.....	1	.....	.....	1	.....	.....	.....	.....	151
2	3	.....	.....	.....	.....	1	.....	.....	.....	1	1	1	.....	.....	1	.....	
3	1	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	2	1	.....	152
2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	
4	1	1	1	.....	.....	.....	.....	2	1	.....	1	1	.....	.....	1	1	153
2	1	.....	1	.....	.....	.....	1	1	1	.....	.....	1	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	154
3	1	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	1	
18	5	1	.....	.....	1	1	1	1	4	3	1	2	5	2	2	1	
11	3	1	.....	.....	1	.....	.....	1	4	1	.....	1	3	1	2	1	
7	2	.....	.....	.....	.....	1	1	.....	.....	2	1	1	2	1	.....	.....	
8	1	1	.....	.....	.....	.....	.....	1	2	.....	.....	1	3	1	1	1	155
5	1	.....	.....	.....	.....	.....	1	.....	.....	1	1	1	1	1	.....	.....	
2	2	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	1	.....	156
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	158
.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
92	1	.....	.....	.....	11	7	8	5	5	10	4	6	5	11	14	7	
46	1	.....	.....	.....	6	3	3	3	2	7	2	4	1	6	8	2	
46	.....	.....	.....	.....	5	4	5	2	3	3	2	2	4	5	6	5	
46	1	.....	.....	.....	6	3	3	3	2	7	2	4	1	6	8	2	159
46	.....	.....	.....	.....	5	4	5	2	3	3	2	2	4	5	6	5	
3	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	159A
5	.....	.....	.....	.....	.....	1	1	1	1	.....	.....	.....	.....	1	.....	.....	
20	.....	.....	.....	.....	2	1	1	1	.....	3	.....	2	1	4	3	2	159B
18	.....	.....	.....	.....	3	2	2	.....	2	1	1	2	2	1	2	.....	
23	1	.....	.....	.....	4	1	2	1	1	4	2	2	.....	2	5	.....	159C
23	.....	.....	.....	.....	2	1	2	1	.....	2	1	.....	2	3	4	5	
406	3	.....	.....	1	32	15	39	33	38	34	39	25	31	39	53	32	
227	2	.....	.....	.....	18	11	20	19	23	19	21	13	15	21	34	15	
179	1	.....	.....	1	14	4	19	14	15	15	18	12	16	18	19	17	
27	1	.....	.....	.....	2	1	4	3	3	3	3	.....	1	3	5	.....	160
13	.....	.....	.....	1	.....	.....	2	3	2	1	.....	1	1	3	.....	1	
180	1	.....	.....	.....	15	6	12	15	18	16	17	12	12	16	27	15	161
144	1	.....	.....	.....	11	4	15	10	9	11	17	8	14	13	18	15	
151	1	.....	.....	.....	13	5	12	15	16	14	15	7	10	13	24	8	161A
126	1	.....	.....	.....	10	4	13	8	8	11	16	7	11	9	16	14	

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
161B. Injury at birth	M	29	29												
	F	18	18												
162. Other diseases peculiar to early infancy	M	20	20												
	F	22	22												
162A. Specified diseases	M	20	20												
	F	22	22												
CLASS XIII.—OLD AGE.															
Total		58					7					4		47	
	M	20					2					3		15	
	F	38					5					1		32	
164. Senility	M	20					2					3		15	
	F	38					5					1		32	
CLASS XIV.—EXTERNAL CAUSES.															
Total		417	80	27	28	17	23	1	6	70	53	40		72	
	M	270	55	20	20	12	12	1	4	47	43	26		30	
	F	147	25	7	8	5	11		2	23	10	14		42	
165-174. Suicides	M	39		2	5	1	2		2	8	15			4	
	F	29		1	4	1	1		1	13	2	1		5	
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	4			1	1			1		1				
	F	2							1			1			
166. Suicide by corrosive substances	M	4								2	1			1	
	F	11			2					7	1			1	
167. Suicide by poisonous gas	M	12			1		2			3	5			1	
	F	7			1	1				2				3	
168. Suicide by hanging or strangulation	M	7		1	1				1		3			1	
	F	3			1					2					
169. Suicide by drowning	M	2									2				
	F	1								1					
170. Suicide by firearms	M	8		1	2					3	1			1	
171. Suicide by cutting or piercing instruments	M	1									1				
172. Suicide by jumping from high places	M	1									1				
	F	5		1			1			1	1			1	
175. Poisoning by food	M	1								1					
	F	2									1			1	
177. Other acute accidental poisonings (gas excepted)	M	4	2			1				1					
	F	4			1					2	1				
178. Conflagration	M	3	2							1					
	F	2		1						1					
179. Accidental burns and scalds (conflagration excepted)	M	10	5	1	1		1			1	1				
	F	15	10							2	2	1			
180. Accidental mechanical suffocation	M	1	1												
	F	2	2												
180A. Overlaying	M	1	1												
180B. Asphyxia	F	2	2												
181. Accidental absorption of irrespirable or poisonous gas	M	15		1		1			1	4	6			2	
	F	6		1	1	1	1							2	
182. Accidental drowning	M	17	5	3	3	2	1			1		1		1	
	F	2	2												
83. Accidental traumatism by firearms	M	3		2	1										
184. Accidental traumatism by cutting or piercing instruments	M	1									1				

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
29	.....	.....	.....	.....	2	1	.....	.....	2	2	2	5	2	3	3	7	161B
18	.....	.....	.....	.....	1	.....	2	2	1	.....	1	1	3	4	2	1	
20	.....	.....	.....	.....	1	4	4	1	2	.....	1	1	2	2	2	.....	162
22	.....	.....	.....	.....	3	.....	2	1	4	3	1	3	1	2	1	1	
20	.....	.....	.....	.....	1	4	4	1	2	.....	1	1	2	2	2	.....	162A
22	.....	.....	.....	.....	3	.....	2	1	4	3	1	3	1	2	1	1	
26	27	3	1	1	8	5	2	4	2	3	1	4	6	6	5	12	
8	11	1	.....	.....	3	3	1	2	1	1	1	1	2	1	2	2	
18	16	2	1	1	5	2	1	2	1	2	.....	3	4	5	3	10	
8	11	1	.....	.....	3	3	1	2	1	1	1	1	2	1	2	2	164
18	16	2	1	1	5	2	1	2	1	2	.....	3	4	5	3	10	
217	118	19	39	24	33	28	43	23	30	32	34	43	43	48	36	24	
131	78	13	29	19	19	15	33	18	15	18	24	32	28	29	27	12	
86	40	6	10	5	14	13	10	5	15	14	10	11	15	19	9	12	
12	13	4	5	5	2	1	6	3	2	4	3	4	6	4	2	2	165–
15	9	.....	4	1	3	3	1	2	7	2	1	3	2	2	1	2	174
.....	2	1	.....	1	.....	.....	.....	1	.....	.....	.....	1	2	.....	.....	.....	165
1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
2	1	.....	1	.....	.....	.....	1	.....	.....	1	.....	.....	1	.....	1	.....	166
6	2	.....	2	1	1	2	.....	.....	3	1	1	2	.....	.....	.....	1	
4	4	1	1	2	1	.....	1	2	1	2	1	1	2	.....	.....	1	167
4	3	.....	.....	.....	1	.....	1	.....	3	1	.....	.....	.....	1	.....	.....	
1	3	.....	2	1	.....	1	2	.....	.....	1	1	1	.....	1	.....	.....	168
.....	1	.....	2	.....	1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	
.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	169
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	
4	2	2	.....	.....	1	.....	1	.....	1	.....	1	.....	1	1	1	1	170
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	171
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	172
3	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	1	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	175
1	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	
3	1	.....	.....	.....	1	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	177
2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	1	
2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	3	.....	.....	.....	.....	178
1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	
8	2	.....	.....	.....	.....	.....	.....	1	1	2	2	1	1	1	1	.....	179
12	1	1	1	.....	3	1	2	.....	1	1	.....	1	1	4	.....	1	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	180
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	180A
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	180B
5	8	.....	1	1	.....	.....	3	1	1	2	3	.....	4	.....	1	.....	181
3	1	.....	1	1	2	.....	1	.....	1	.....	.....	.....	.....	2	.....	.....	
6	5	1	3	2	1	.....	.....	1	1	2	3	5	1	1	2	.....	182
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	183
.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	184

TABLE 39—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
185. Accidental traumatism by fall	M	51	3	5	4	4	2	.....	.....	7	2	11	.....	13	.....
	F	54	.....	.....	2	1	8	.....	.....	.....	1	10	.....	29	.....
187. Accidental traumatism by machines	M	8	.....	.....	1	.....	.....	.....	.....	3	2	2	.....	.....	.....
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	94	25	5	4	2	6	.....	1	17	12	12	.....	10	.....
	F	24	8	3	.....	2	1	.....	.....	2	2	2	.....	4	.....
188A. Railroad accidents	M	8	1	.....	.....	.....	.....	.....	.....	3	2	1	.....	1	.....
188B. Street car accidents	M	9	.....	.....	.....	.....	1	.....	.....	.....	4	4	.....	.....	.....
	F	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
188C. Automobile accidents	M	61	18	5	2	1	5	.....	1	11	4	6	.....	8	.....
	F	20	8	2	.....	2	1	.....	.....	2	2	2	.....	1	.....
188D. Aeroplane and balloon accidents	M	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
188E. Injuries by other vehicles	M	7	3	.....	.....	1	.....	.....	.....	.....	2	1	.....	.....	.....
188F. Other crushing	M	8	3	.....	1	.....	.....	.....	.....	3	.....	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
189. Injuries by animals (poisoning excepted)	M	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
195. Lightning	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
196. Other accidental electric shocks	M	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
197-199. Homicides	M	14	8	.....	1	1	.....	1	.....	2	1	.....	.....	.....	.....
	F	8	3	1	.....	.....	.....	.....	1	3	.....	.....	.....	.....	.....
197. Homicide by firearms	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....
198. Homicide by cutting or piercing instruments	M	3	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
199. Homicide by other means	M	10	7	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....
	F	5	3	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
201. Fracture (cause not specified)	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
202. Other external violence (cause specified)	M	4	3	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
CLESS XV.—ILL-DEFINED DISEASES.															
Total		8	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	5	.....
	M	4	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	.....
	F	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
205. Cause of death not specified or ill-defined	M	4	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	.....
	F	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....
205C. Heart failure	M	4	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	.....
	F	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....

NATIVITY, AND MONTH OF DEATH—TORONTO, 1928.—Concluded

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
21	19	5	4	2	5	4	9	4	3	2	2	4	8	8	2	....	185
27	18	4	1	1	3	7	3	2	3	8	6	2	4	5	3	5	
3	2	....	3	....	....	....	1	1	....	....	....	....	2	1	2	1	187
54	23	2	10	5	8	9	9	5	5	6	7	11	6	9	11	8	188
16	6	1	1	....	2	1	1	....	3	1	1	1	5	6	2	1	
4	4	....	....	....	....	....	4	....	....	....	....	....	1	2	1	....	188A
5	4	....	....	....	1	1	1	....	1	....	....	1	....	....	1	3	188B
2	....	....	1	....	....	....	....	....	....	....	....	....	1	1	1	....	
36	11	2	7	5	4	6	3	5	3	4	5	7	5	6	8	5	188
14	5	1	....	....	2	1	....	....	3	1	1	1	4	5	1	1	
....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	188D
5	1	....	1	....	1	1	1	....	1	....	1	....	....	1	1	....	188E
4	2	....	2	....	2	1	....	....	....	1	1	3	....	....	....	....	188F
....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
....	1	....	1	....	....	....	....	....	....	....	....	....	....	1	1	....	189
....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	195
1	....	1	....	....	....	....	....	....	....	....	1	1	....	....	....	....	196
8	2	....	....	4	1	1	3	1	1	....	1	2	....	1	3	....	197–
3	2	....	1	2	1	1	1	....	....	1	1	....	....	....	2	1	199
1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	197
1	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	
1	2	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	198
....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	
6	....	....	....	4	....	1	3	1	....	....	....	1	....	1	3	....	199
2	1	....	....	2	1	....	....	....	....	1	1	....	....	....	2	....	
1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	201
3	....	....	1	....	1	....	....	1	....	....	....	....	....	1	....	1	202
1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	
4	1	2	1	....	....	....	....	1	1	1	....	1	....	1	1	2	
1	1	2	....	....	....	....	....	....	....	1	....	1	....	1	1	....	
3	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	2	
1	1	2	....	....	....	....	....	....	....	1	....	1	....	1	1	....	205
3	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	2	
1	1	2	....	....	....	....	....	....	....	1	....	1	....	1	1	....	205C
3	....	....	1	....	....	....	....	1	1	....	....	....	....	....	....	2	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
DEATHS—ALL CAUSES, **Total.**		**1,471**	**272**	**47**	**34**	**47**	**57**	**1**	**12**	**150**	**284**	**232**	.....	**335**	.....
	M	765	157	24	20	26	24	1	2	66	176	151	.....	118	.....
	F	706	115	23	14	21	33	.....	10	84	108	81	.....	217	.....
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.															
Total	..	147	34	15	11	3	3	.....	3	28	24	12	.....	14	.....
	M	75	18	2	7	2	.....	.....	.....	16	18	9	.....	3	.....
	F	72	16	13	4	1	3	.....	3	12	6	3	.....	11	.....
1. Typhoid and paratyphoid fever	M	2	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
1A. Typhoid fever	M	2	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	3	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
7. Measles	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8. Scarlet fever	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
9. Whooping-cough	M	5	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10. Diphtheria	M	5	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11. Influenza	M	25	3	1	.....	1	.....	.....	.....	8	4	5	.....	3	.....
	F	22	3	1	1	.....	3	.....	.....	4	1	3	.....	6	.....
11A. Influenza, sole cause	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11C. Influenza, with bronchitis	M	3	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....
	F	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
11D. Influenza, with pneumonia	M	13	3	1	.....	1	.....	.....	.....	4	.....	3	.....	1	.....
	F	16	1	.....	1	.....	1	.....	.....	3	1	3	.....	6	.....
11E. Influenza, with other respiratory diseases	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
11G. Influenza, with other causes	M	7	.....	.....	.....	.....	.....	.....	.....	3	2	1	.....	1	.....
	F	4	2	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
16. Dysentery	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
21. Erysipelas	M	2	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	4	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	.....
22. Acute anterior poliomyelitis	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23. Lethargic encephalitis	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
24. Meningococcus meningitis	M	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25. Other epidemic and endemic diseases	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25A. Chicken-pox	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29. Tetanus	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30. Mycoses	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31-37. Tuberculosis	M	20	1	1	5	.....	.....	.....	.....	4	8	1	.....	.....	.....
	F	29	3	11	1	1	.....	.....	3	5	4	.....	.....	1	.....
31. Tuberculosis of the respiratory system	M	15	.....	1	3	.....	.....	.....	.....	4	7	.....	.....	.....	.....
	F	18	.....	7	1	1	.....	.....	2	4	2	.....	.....	1	.....
32. Tuberculosis of the meninges and central nervous system	M	2	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	4	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33. Tuberculosis of the intestines and peritoneum	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
34. Tuberculosis of the vertebral column	M	3	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....
35. Tuberculosis of the joints	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
36. Tuberculosis of other organs	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
36D. Tuberculosis of the genito-urinary system	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
37. Disseminated tuberculosis	F	4	.....	2	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
37A. Disseminated tuberculosis, acute	F	4	.....	2	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....
38. Syphilis	M	5	1	.....	.....	1	.....	.....	.....	1	2	.....	.....	.....	.....
	F	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
41. Purulent infection, septicaemia	M	6	.....	.....	.....	.....	.....	.....	.....	3	2	1	.....	.....	.....
	F	3	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
845	**489**	**47**	**84**	**6**	**110**	**121**	**150**	**130**	**115**	**109**	**116**	**120**	**103**	**119**	**126**	**152**	
435	248	24	55	3	61	61	77	77	61	53	65	58	60	58	64	70	
410	241	23	29	3	49	60	73	53	54	56	51	62	43	61	62	82	
90	42	1	14	.....	8	13	15	18	14	12	10	9	6	9	8	25	
44	20	1	10	....	6	7	6	10	5	6	8	4	3	4	4	12	
46	22	.....	4	....	2	6	9	8	9	6	2	5	3	5	4	13	
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1
2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	1A
2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	7
.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	8
5	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	2	1	.....	.....	9
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
4	1	.....	.....	.....	1	1	1	.....	.....	.....	.....	1	.....	1	.....	.....	10
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
12	10	.....	3	.....	3	1	3	2	3	.....	1	1	.....	2	2	7	11
13	9	.....	.....	.....	1	4	3	.....	1	2	.....	.....	1	.....	.....	10	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	11A
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	3	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	11C
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
6	5	.....	2	...	1	.....	2	2	1	.....	.....	.....	.....	1	2	4	11D
8	8	.....	.....	.....	.....	3	2	.....	1	2	.....	.....	.....	.....	.....	8	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	11E
5	1	.....	1	.....	1	1	1	.....	2	.....	.....	.....	.....	1	.....	1	11G
3	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	16
2	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	21
3	1	.....	.....	.....	.....	.....	1	1	2	.....	.....	.....	.....	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	22
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	23
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	24
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	25
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	25A
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	29
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	30
10	5	1	4	....	.....	4	1	4	1	3	2	1	.....	.....	2	2	31–37
17	9	.....	3	....	.....	2	4	4	1	3	1	3	1	4	4	2	
6	5	1	3	....	.....	3	1	2	1	1	2	1	.....	.....	2	2	31
11	6	.....	1	....	.....	1	3	1	1	2	1	3	1	2	3	....	
1	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	32
2	1	.....	1	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	33
3	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	34
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	35
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	36
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	36D
2	2	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	1	37
2	2	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	1	37A
3	1	.....	1	.....	1	.....	.....	2	.....	.....	2	.....	.....	.....	.....	.....	38
1	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	
2	2	.....	2	.....	.....	.....	1	1	.....	2	1	1	.....	.....	.....	.....	41
2	.....	.....	1	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.															
Total		238	9	5	6	17	12	.....	.....	21	71	42	.....	55	.....
	M	119	7	2	4	8	5	.....	.....	8	36	30	.....	19	.....
	F	119	2	3	2	9	7	.....	.....	13	35	12	.....	36	.....
43-49. Cancer	M	86	2	2	2	7	4	.....	.....	5	26	25	.....	13	.....
	F	91	.....	2	1	8	6	.....	.....	9	27	10	.....	28	.....
43. Cancer of the buccal cavity	M	6	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	3	.....
44. Cancer of the stomach and liver	M	28	1	.....	1	3	1	.....	.....	3	9	6	.....	4	.....
	F	23	.....	.....	.....	2	1	.....	.....	.....	6	2	.....	12	.....
45. Cancer of the peritoneum, intestines and rectum	M	9	.....	.....	.....	1	1	.....	.....	1	2	4	.....	.....	.....
	F	22	.....	2	1	2	3	.....	.....	2	7	1	.....	4	.....
46. Cancer of the female genital organs	F	16	.....	.....	.....	1	1	.....	.....	5	7	1	.....	1	.....
47. Cancer of the breast	F	16	.....	.....	.....	1	.....	.....	.....	1	4	1	.....	9	.....
48. Cancer of the skin	M	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
49. Cancer of other or unspecified organs	M	41	1	2	1	3	2	.....	.....	1	13	12	.....	6	.....
	F	14	.....	.....	.....	2	1	.....	.....	1	3	5	.....	2	.....
49A. Cancer of the eye and ear	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
49B. Cancer of the circulatory system	M	3	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....
	F	4	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	1	.....
49C. Cancer of the respiratory system	M	10	.....	.....	.....	2	1	.....	.....	.....	6	1	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
49D. Cancer of the digestive system	M	5	.....	1	.....	1	.....	.....	.....	.....	2	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
49E. Cancer of the genito-urinary organs	M	21	.....	.....	1	.....	1	.....	.....	.....	4	10	.....	5	.....
	F	2	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....
49F. Cancer of the bones and joints	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
49G. Cancer of other specified organs	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
49H. Generalized cancer	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
49I. Unspecified cancer	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
51. Acute rheumatic fever	M	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
52. Chronic rheumatism, osteo-arthritis, gout	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
56. Rickets	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57. Diabetes mellitus	M	10	.....	.....	.....	.....	1	.....	.....	1	4	1	.....	3	.....
	F	10	.....	.....	.....	.....	1	.....	.....	.....	3	1	.....	5	.....
58. Anaemia, chlorosis	M	4	.....	.....	.....	1	.....	.....	.....	.....	1	2	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
58A. Pernicious anaemia	M	4	.....	.....	.....	1	.....	.....	.....	.....	1	2	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
60. Diseases of the thyroid gland	M	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
	F	7	.....	.....	.....	1	.....	.....	.....	1	5	.....	.....	.....	.....
60A. Exophthalmic goiter	F	3	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
60B. Other diseases of the thyroid gland	M	2	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
	F	4	.....	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	.....
62. Diseases of the thymus	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
63. Diseases of the adrenals (Addison's disease)	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
65. Leukaemia, lymphadenoma	M	3	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....
65A. Leukaemia	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
65B. Lymphadenoma (Hodgkin's disease)	M	2	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1
66. Alcoholism	M	5	.....	.....	2	.....	.....	.....	.....	1	1	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
110	104	11	13	....	14	25	21	17	18	13	28	33	15	16	21	17	
48	57	6	8	....	9	14	14	8	8	6	11	15	9	8	8	9	
62	47	5	5	....	5	11	7	9	10	7	17	18	6	8	13	8	
27	48	4	7	....	5	8	8	6	7	4	8	15	6	8	6	5	43–49
47	36	4	4	....	3	8	6	7	8	3	14	15	6	5	11	5	
1	5	....	....	....	....	1	1	2	1	....	1	....	....	....	....	....	43
10	13	2	3	....	2	3	5	2	3	1	4	6	....	1	....	1	44
10	11	....	2	....	....	3	2	2	3	....	5	3	2	1	2	....	
5	3	1	....	....	1	....	....	....	1	....	....	2	2	2	1	....	45
14	7	1	....	....	1	3	1	1	2	1	4	3	1	1	4	....	
7	7	2	....	....	....	....	2	1	1	2	3	3	1	1	1	1	46
8	7	....	1	....	1	1	....	2	1	....	1	3	1	1	3	2	47
1	1	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	48
10	26	1	4	....	2	3	2	2	2	2	3	7	4	5	5	4	49
8	4	1	1	....	1	1	1	1	1	....	1	3	1	1	1	2	
.....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	49A
1	2	....	....	....	1	....	1	....	....	....	....	....	....	....	1	....	49B
4	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	1	
1	8	....	1	....	....	1	....	....	....	1	....	2	3	1	....	2	49C
.....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	
3	2	....	....	....	1	....	....	....	....	....	....	2	....	2	....	....	49D
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	
4	14	1	2	....	....	2	1	1	2	1	3	3	1	2	3	2	49E
2	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	
1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	49F
1	1	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	
.....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	49G
.....	1	....	1	....	....	....	....	1	....	....	....	1	....	....	....	....	49H
.....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	49I
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	50
.....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
1	1	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	51
1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	
.....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	52
.....	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	
2	....	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	56
5	3	1	1	....	2	2	2	....	....	....	....	....	2	....	....	2	57
5	5	....	....	....	....	....	....	1	....	1	2	2	....	2	1	1	
3	1	....	....	....	1	1	1	1	....	....	....	....	....	....	....	....	58
.....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
3	1	....	....	....	1	1	1	1	....	....	....	....	....	....	....	....	58A
.....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	
2	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	60
4	2	....	1	....	1	....	....	....	1	2	1	....	....	1	....	1	
1	2	....	....	....	1	....	....	....	1	1	....	....	....	....	....	....	60A
2	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	60B
3	....	....	1	....	....	....	....	....	....	1	1	....	....	1	....	1	
2	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	62
2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	
1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	63
1	2	....	....	....	1	1	....	....	1	....	....	....	....	....	....	....	65
.....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	65A
1	1	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	65B
4	1	....	....	....	....	....	....	....	....	1	2	....	....	....	2	....	66
1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Single						Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
66B. Acute alcoholism	M	4			2						1			1	
	F	1												1	
66C. Chronic alcoholism	M	1								1					
67. Chronic poisoning by mineral substances	M	1									1				
67A. Chronic lead poisoning	M	1									1				
68. Chronic organic poisoning	F	1								1					
68C. Other organic poisoning	F	1								1					
69. Other general diseases	F	2	1							1					
69B. Haemophilia	F	1	1												
69C. Purpura haemorrhagica	F	1								1					
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.															
Total		121	12	4	3	9	6	1	1	9	21	21		34	
	M	69	8	3	1	6	3	1		5	9	12		21	
	F	52	4	1	2	3	3		1	4	12	9		13	
70. Encephalitis	M	2	1	1											
	F	3	1							2					
70A. Abscess of brain	M	2	1	1											
	F	1								1					
70B. Encephalitis	F	2	1							1					
71. Meningitis	M	3	2	1											
	F	3	1						1					1	
71A. Simple meningitis	M	3	2	1											
	F	3	1						1					1	
72. Tabes dorsalis (locomotor ataxia)	M	1												1	
73. Other diseases of the spinal cord	M	2									1			1	
	F	3					1			1		1			
74. Cerebral haemorrhage, apoplexy	M	48	1	1		2	3	1		3	7	12		18	
	F	33			1	2	2			1	9	7		11	
74A. Apoplexy	M	16									3	5		8	
	F	14				1	1				3	3		6	
74B. Cerebral haemorrhage	M	28	1	1		2	3	1		3	2	6		9	
	F	19			1	1	1			1	6	4		5	
74C. Cerebral thrombosis and embolism	M	4									2	1		1	
75. Paralysis without specified cause	M	1												1	
	F	1				1									
75A. Hemiplegia	M	1												1	
	F	1				1									
78. Epilepsy	M	2	1		1										
80. Infantile convulsions (under 5 years of age)	M	2	2												
	F	1	1												
81. Chorea	F	1										1			
82. Neuralgia and neuritis	F	1												1	
84. Other diseases of the nervous system	M	6				4				1	1				
	F	6	1	1	1						3				
85. Diseases of the eye and annexa	M	1								1					
86. Diseases of the ear and of the mastoid process	M	1	1												
86A. Diseases of the ear	M	1	1												
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.															
Total		326	4	3	2	5	21			10	79	75		127	
	M	169	1	3	1	4	11			2	51	51		45	
	F	157	3		1	1	10			8	28	24		82	
87-90. Diseases of the heart	M	102	1	3	1	1	7			2	32	28		27	
	F	114	3		1	1	9			7	18	16		59	

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
3	1									1	2				1		66B
1									1								
1															1		66C
		1				1											67
		1				1											67A
		1													1		68
		1													1		68C
1	1				1	1											69
1						1											69B
	1				1												69C
72	34	3	10	2	8	9	14	11	8	8	8	9	8	14	13	11	
40	18	2	7	2	4	6	5	10	5	5	3	7	6	6	7	5	
32	16	1	3		4	3	9	1	3	3	5	2	2	8	6	6	
1	1					1		1									70
2		1			1					1						1	
1	1					1		1									70A
1					1												
1		1								1						1	70B
2	1										1	1				1	71
1	2									1	1		1				
2	1										1	1				1	71A
1	2									1	1		1				
1														1			72
1	1					1										1	73
2	1								1			1				1	
27	11	2	7	1	4	3	3	6	4	5		6	6	4	5	2	74
19	12		2		1	3	7	1	1	1	3		1	6	5	4	
12	2		2		2	1	2	2	4	1				1	3		74A
10	4				1	1	2		1		1		1	2	2	3	
11	9	2	5	1	2	2	1	4		4		4	6	3	1	1	74B
9	8		2			2	5	1		1	2			4	3	1	
4												2			1	1	74
1								1									75
1					1												
1								1									75A
1					1												
2						1					1						78
2							1	1									80
1							1										
	1										1						81
1									1								82
1	4			1			1		1		1			1	2		84
5			1		1		1					1		2	1		
1																1	85
1								1									86
1								1									86A
162	141	14	8	1	27	18	32	25	29	31	28	25	18	25	29	39	
83	72	9	5		14	8	16	15	14	15	16	14	9	11	19	18	
79	69	5	3	1	13	10	16	10	15	16	12	11	9	14	10	21	
53	41	4	4		9	5	11	10	11	7	7	7	7	7	13	8	87–90
55	53	3	2	1	10	6	11	6	14	12	8	8	7	8	9	15	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
87. Pericarditis	F	1	1												
88. Endocarditis and myocarditis (acute)	M	3	1								2				
	F	6									2			4	
88A. Acute endocarditis	M	2									2				
	F	1									1				
88B. Acute myocarditis	M	1	1												
	F	5									1			4	
89. Angina pectoris	M	8									3	4		1	
	F	3										1		2	
90. Other diseases of the heart	M	91		3	1	1	7			2	27	24		26	
	F	104	2		1	1	9			7	16	15		53	
90A. Valvular disease	M	11		2			3				4	2			
	F	15					2			3	2	2		6	
90D. Chronic endocarditis	M	6		1						1	2	1		1	
	F	7	2		1					2		1		1	
90E. Chronic myocarditis	M	63			1	1	3			1	19	16		22	
	F	71				1	5			2	12	9		42	
90F. Others under this title	M	11					1				2	5		3	
	F	11					2				2	3		4	
91. Diseases of the arteries	M	65				3	4				17	23		18	
	F	42					1			1	9	8		23	
91A. Aneurysm	M	5				2					2	1			
	F	1												1	
91B. Arteriosclerosis	M	60				1	4				15	22		18	
	F	41					1			1	9	8		22	
92. Embolism and thrombosis (not cerebral)	M	2									2				
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	F	1									1				
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.															
Total		162	52	2		4	2		1	12	21	30		38	
	M	87	34	2		3			1	7	15	14		11	
	F	75	18			1	2			5	6	16		27	
98. Diseases of the larynx	M	1	1												
98B. Laryngitis	M	1	1												
99. Bronchitis	M	2				1						1			
	F	1												1	
99A. Bronchitis, acute	F	1												1	
98B. Bronchitis, chronic	M	2				1						1			
100. Broncho-pneumonia (including capillary bronchitis)	M	26	23								1			2	
	F	24	12				1			1		4		6	
100A. Broncho-pneumonia	M	26	23								1			2	
	F	24	12				1			1		4		6	
101. Pneumonia	M	44	8	2		2				5	11	9		7	
	F	41	4			1	1			1	6	11		17	
101A. Pneumonia, lobar	M	28	4	1		1				3	9	5		5	
	F	27	2			1	1			1	6	6		10	
101B. Pneumonia, not otherwise defined	M	16	4	1		1				2	2	4		2	
	F	14	2									5		7	
102. Pleurisy	M	6	1						1	1	2	1			
	F	3								2				1	
103. Congestion and haemorrhagic infarct of the lung	M	4	1									1		2	
	F	2	1											1	
105. Asthma	M	3									1	2			
	F	2								1				1	
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1								1					
	F	2	1									1			
107C. Others under this title	M	1								1					
	F	2	1									1			

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1														1			87
3									1			1			1		88
1	5					1	1		1	1		1			1		
2									1			1					88A
	1						1										
1															1		88B
1	4					1			1	1		1			1		
7	1						1	2	1		1	2			1		89
	3				1			1	1								
43	40	4	4		9	5	10	8	9	7	6	4	7	7	11	8	90
53	45	3	2	1	9	5	10	5	12	11	8	7	7	7	8	15	
5	6					2	1	1	1	1	1	1	1		2		90A
8	7				1	1	4	1	4		3			1			
4	2							1	2						1	2	90D
7					1				1	1	1			1		2	
28	27	4	4		8	3	7	6	5	5	5	2	6	6	5	5	90E
33	33	2	2	1	7	4	5	3	6	7	4	6	7	4	7	11	
6	5				1		2		1	1		1		1	3	1	90F
5	5	1					1	1	1	3		1		1	1	2	
30	30	4	1		4	3	5	5	3	8	9	7	2	3	6	10	91
24	15	2	1		3	3	5	4	1	4	4	3	2	6	1	6	
2	3				2					1		1		1			91A
1								1									
28	27	4	1		2	3	5	5	3	7	9	6	2	2	6	10	91B
23	15	2	1		3	3	5	3	1	4	4	3	2	6	1	6	
	1	1			1									1			92
	1					1											93
95	45	8	14		15	22	28	16	8	9	4	10	11	9	14	16	
54	19	3	11		11	7	15	10	5	4	2	5	6	5	9	8	
41	26	5	3		4	15	13	6	3	5	2	5	5	4	5	8	
1														1			98
1														1			98B
	2				1						1						99
1																1	
1																1	99A
	2				1						1						99B
21	1	2	2		2	3	6	2	1	1			1	2	5	3	100
15	6	2	1		2	7	4	2		3	1	1	1		2	1	
21	1	2	2		2	3	6	2	1	1			1	2	5	3	100A
15	6	2	1		2	7	4	2		3	1	1	1		2	1	
26	11	1	6		7	4	8	6	3	2		2	4	2	4	2	101
23	17	1			2	7	7	3	3	1		4	3	3	3	5	
13	11	1	3		2	4	4	4	2	2		1	4	2	2	1	101A
13	13	1			2	3	7	1	3			3	2	2	3	1	
13			3		5		4	2	1			1			2	1	101B
10	4					4		2		1		1	1	1		4	
3	1		2		1			2	1			1				1	102
		1	2				1			1				1			
2	2						1				1	1	1				103
1	1					1	1										
1	2											1				2	105
	1	1									1					1	
			1							1							107
1	1							1					1				
			1						1								107C
1	1							1					1				

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.															
Total		108	46	3	3	3	1	.....	.....	14	20	7	.....	11	.....
	M	51	25	2	1	1	.....	.....	.....	7	10	2	.....	3	.....
	F	57	21	1	2	2	1	.....	.....	7	10	5	.....	8	.....
108. Diseases of the mouth and annexa	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	3	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
109B. Pharynx and tonsils	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	3	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
110. Diseases of the oesophagus	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
111. Ulcer of the stomach and duodenum	M	11	.....	.....	1	1	.....	.....	.....	4	3	.....	.....	2	.....
	F	6	.....	.....	.....	1	.....	.....	.....	.....	3	2	.....	.....	.....
111A. Ulcer of the stomach	M	5	.....	.....	1	.....	.....	.....	.....	.....	2	.....	.....	2	.....
	F	5	.....	.....	.....	1	.....	.....	.....	.....	3	1	.....	.....	.....
111B. Ulcer of the duodenum	M	6	.....	.....	.....	1	.....	.....	.....	4	1	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
112. Other diseases of the stomach (cancer excepted)	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
113. Diarrhoea and enteritis (under 2 years of age)	M	19	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	15	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
114. Diarrhoea and enteritis (2 years or over)	M	3	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
117. Appendicitis and typhlitis	M	5	2	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	F	5	1	.....	1	.....	1	.....	.....	1	.....	1	.....	.....	.....
118. Hernia, intestinal obstruction	M	5	2	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....
	F	7	2	.....	.....	.....	.....	.....	.....	.....	2	1	.....	2	.....
118A. Hernia	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
118B. Intestinal obstruction	M	4	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
	F	5	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....
119. Other diseases of the intestines	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
122. Cirrhosis of the liver	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	5	.....	1	.....	1	.....	.....	.....	1	1	.....	.....	1	.....
122B. Not specified as alcoholic	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	5	.....	1	.....	1	.....	.....	.....	1	1	.....	.....	1	.....
123. Bilary calculi	F	2	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....
124. Other diseases of the liver	M	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....
125. Diseases of the pancreas	F	3	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....	.....
126. Peritonitis without specified cause	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.															
Total		125	5	2	2	4	9	.....	1	14	28	35	.....	25	.....
	M	70	3	.....	1	1	5	.....	.....	6	19	26	.....	9	.....
	F	55	2	2	1	3	4	.....	1	8	9	9	.....	16	.....
128. Acute nephritis (including unspecified, under 10 years of age)	M	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
129. Chronic nephritis (Bright's disease)	M	43	.....	.....	1	1	3	.....	.....	5	15	14	.....	4	.....
	F	40	1	1	1	2	4	.....	.....	2	7	9	.....	13	.....
131. Other diseases of the kidneys and annexa	M	5	2	.....	.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....
	F	6	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	2	.....

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
		Foreign															
Canada	British	USA	Other	Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
80	24	.....	3	1	9	6	3	13	12	4	10	7	19	10	10	5	
39	10	.....	2	....	4	5	3	8	6	1	3	2	9	4	4	2	
41	14	.....	1	1	5	1	.....	5	6	3	7	5	10	6	6	3	
1	.....	.....	.....	....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	108
.....	.....	.....	1	....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	109
2	1	.....	.....	....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	
.....	.....	.....	1	....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	109B
2	1	.....	.....	....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	
1	.....	.....	.....	....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	110
4	6	.....	1	....	1	1	.....	2	2	1	2	.....	.....	.....	1	1	111
5	1	.....	.....	....	.....	.....	.....	1	2	.....	1	1	.....	.....	.....	1	
2	3	.....	.....	....	.....	1	.....	1	1	.....	2	.....	.....	.....	.....	.....	111A
4	1	.....	.....	....	.....	.....	.....	1	2	.....	1	1	.....	.....	.....	.....	
2	3	.....	1	....	1	.....	.....	1	1	1	.....	.....	.....	.....	1	1	111B
1	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
1	.....	.....	.....	....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	112
.....	.....	.....	1	....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	
19	.....	.....	.....	....	1	1	1	2	.....	.....	1	1	7	3	2	.....	113
15	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	1	1	7	4	2	.....	
2	1	.....	.....	....	1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	114
1	.....	.....	.....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
4	1	.....	.....	....	1	.....	.....	.....	1	.....	.....	1	2	.....	.....	.....	117
4	1	.....	.....	....	1	.....	.....	.....	1	.....	2	1	.....	.....	.....	.....	
3	2	.....	.....	....	.....	1	1	1	1	.....	.....	.....	.....	.....	.....	1	118
4	3	.....	.....	....	2	.....	.....	.....	2	1	.....	1	.....	.....	.....	1	
.....	1	.....	.....	....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	118A
1	1	.....	.....	....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
3	1	.....	.....	....	.....	1	1	1	.....	.....	.....	.....	.....	.....	.....	1	118B
3	2	.....	.....	....	1	.....	.....	.....	2	1	.....	1	.....	.....	.....	.....	
1	.....	.....	.....	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	119
1	1	.....	.....	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	
1	.....	.....	.....	....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	122
3	2	.....	.....	....	1	.....	.....	1	.....	.....	1	1	.....	.....	.....	1	
1	.....	.....	.....	....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	122B
3	2	.....	.....	....	1	.....	.....	1	.....	.....	1	1	.....	.....	.....	1	
2	.....	.....	.....	....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	123
2	.....	.....	.....	....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	124
1	2	.....	.....	....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	
.....	3	.....	.....	....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	125
1	.....	.....	.....	....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	126
2	.....	.....	.....	....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	
66	48	5	5	1	11	10	11	7	8	10	11	11	14	13	12	7	
38	26	1	4	1	5	6	5	3	5	6	7	6	9	9	7	2	
28	22	4	1	....	6	4	6	4	3	4	4	5	5	4	5	5	
1	1	.....	.....	....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	128
1	1	.....	.....	....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	
23	16	.....	3	1	2	3	3	2	3	3	5	4	7	6	5	.....	129
21	16	2	1	.....	5	3	5	2	3	4	2	3	4	2	3	4	
4	1	.....	.....	....	.....	.....	1	.....	1	1	.....	.....	1	1	.....	.....	131
2	2	2	.....	....	.....	.....	.....	.....	.....	.....	1	2	1	2	.....	.....	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
132. Calculi of the urinary passages	M	1										1			
133. Diseases of the bladder	M	2										1		1	
135. Diseases of the prostate	M	17					2				3	8		4	
137. Cysts and other benign tumours of the ovary	F	2								2					
139. Benign tumours of the uterus	F	1								1					
141. Other diseases of the female genital organs	F	4							1	3					
CLASS VIII.—THE PUERPERAL STATE.															
Total		29		2	2				4	21					
143. Accidents of pregnancy	F	4							1	3					
143A. Abortion	F	1							1						
143B. Ectopic gestation	F	2								2					
143D. Abortion, self-induced	F	1								1					
144. Puerperal haemorrhage	F	2								2					
145. Other accidents of labour	F	5		1						4					
145A. Caesarean section	F	2								2					
145C. Other surgical operations and instrumental delivery	F	3		1						2					
146. Puerperal septicaemia	F	7		1					2	4					
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	3								3					
148. Puerperal albuminuria and convulsions	F	6			2				1	3					
149. Following childbirth (not otherwise defined)	F	2								2					
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.															
Total		7	3							2	1			1	
	M	5	3							1	1				
	F	2								1				1	
153. Acute abscess	M	4	2							1	1				
	F	1								1					
154. Other diseases of the skin and annexa	M	1	1												
	F	1												1	
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.															
Total		2	1								1				
	M	2	1								1				
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	2	1								1				
CLASS XI.—MALFORMATIONS.															
Total		13	13												
	M	6	6												
	F	7	7												
159. Congenital malformations (stillbirths not included)	M	6	6												
	F	7	7												

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1																1	132
	2						1					1					133
9	6	1	1		3	3		1	1	2		1	1	2	2	1	135
1	1							1			1						137
1								1									139
2	2				1	1									2		141
14	8	2	5		1	5	6	3	1	3	1	2	1	2	3	1	
1	1		2				2	1						1			143
			1				1										143A
1	1							1						1			143B
			1				1										143D
	2										1		1				144
2	1		2		1		2			1					1		145
1			1				2										145A
1	1		1		1					1					1		145C
4		2	1			2			1	2		1			1		146
2	1					1		1								1	147
3	3					1	2					1		1	1		148
2						1		1									149
3	3	1					1	2		1	2		1				
3	1	1					1	2			1		1				
	2									1	1						
2	1	1					1	2			1						153
	1										1						
1													1				154
	1									1							
2										1						1	
2										1						1	
2										1						1	155
12		1				1	2	1	1		2		1	4	1		
5		1							1		2		1	2			
7						1	2	1						2	1		
5		1							1		2		1	2			159
7						1	2	1						2	1		

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
159A. Congenital hydrocephalus	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....
	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....
159B. Congenital malformations of the heart	F	3	3	....	....	....	....	....	....	....	....	....	....	....	....
159C. Others under this title	M	4	4	....	....	....	....	....	....	....	....	....	....	....	....
	F	3	3	....	....	....	....	....	....	....	....	....	....	....	....
CLASS XII.—DISEASES OF EARLY INFANCY.															
Total		77	77	....	....	....	....	....	....	....	....	....	....	....	....
	M	43	43	....	....	....	....	....	....	....	....	....	....	....	....
	F	34	34	....	....	....	....	....	....	....	....	....	....	....	....
160. Congenital debility, icterus and sclerema	M	7	7	....	....	....	....	....	....	....	....	....	....	....	....
	F	10	10	....	....	....	....	....	....	....	....	....	....	....	....
161. Premature birth, injury at birth	M	31	31	....	....	....	....	....	....	....	....	....	....	....	....
	F	21	21	....	....	....	....	....	....	....	....	....	....	....	....
161A. Premature birth	M	23	23	....	....	....	....	....	....	....	....	....	....	....	....
	F	17	17	....	....	....	....	....	....	....	....	....	....	....	....
161B. Injury at birth	M	8	8	....	....	....	....	....	....	....	....	....	....	....	....
	F	4	4	....	....	....	....	....	....	....	....	....	....	....	....
162. Other diseases peculiar to early infancy	M	5	5	....	....	....	....	....	....	....	....	....	....	....	....
	F	3	3	....	....	....	....	....	....	....	....	....	....	....	....
161A. Specified diseases	M	5	5	....	....	....	....	....	....	....	....	....	....	....	....
	F	3	3	....	....	....	....	....	....	....	....	....	....	....	....
CLASS XIII.—OLD AGE.															
Total		14	....	....	....	....	....	....	....	....	1	3	....	10	....
	M	2	....	....	....	....	....	....	....	....	1	1	....	....	....
	F	12	....	....	....	....	....	....	....	....	....	2	....	10	....
164. Senility	M	2	....	....	....	....	....	....	....	....	1	1	....	....	....
	F	12	....	....	....	....	....	....	....	....	....	2	....	10	....
CLASS XIV.—EXTERNAL CAUSES.															
Total		97	15	11	5	2	3	....	2	17	16	6	....	20	....
	M	64	8	10	5	1	....	....	1	13	14	5	....	7	....
	F	33	7	1	....	1	3	....	1	4	2	1	....	13	....
165-174. Suicides	M	6	....	....	1	....	....	....	1	2	....	1	....	1	....
	F	2	....	....	....	....	....	....	1	1	....	....	....	....	....
165. Suicide by solid or liquid poisons (corrosive substances excepted)	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....
	F	1	....	....	....	....	....	....	1	....	....	....	....	....	....
166. Suicide by corrosive substances	M	1	....	....	....	....	....	....	1	....	....	....	....	....	....
	F	1	....	....	....	....	....	....	....	1	....	....	....	....	....
168. Suicide by hanging or strangulation	M	2	....	....	1	....	....	....	....	1	....	....	....	....	....
169. Suicide by drowning	M	1	....	....	....	....	....	....	....	....	....	1	....	....	....
172. Suicide by jumping from high places	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....
175. Poisoning by food	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....
177. Other acute accidental poisonings (gas excepted)	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....
179. Accidental burns and scalds (conflagration excepted)	M	1	....	....	....	....	....	....	....	1	....	....	....	....	....
	F	2	....	....	....	....	....	....	....	....	1	....	....	1	....
181. Accidental absorption of irrespirable or poisonous gas	M	2	....	1	....	....	....	....	....	....	....	....	....	1	....
	F	2	....	....	....	....	....	....	....	1	....	....	....	1	....

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
2											1			1			159A
1							1										
3						1	1							1			159B
3		1							1		1		1	1			159C
3								1						1	1		
77					9	5	8	4	5	3	5	8	3	5	8	14	
43					4	4	6	4	4	1	5	3	1	3	4	4	
34					5	1	2		1	2		5	2	2	4	10	
7					1	1	1						1	1	1	1	160
10					1							3	1		1	4	
31					3	3	5	3	3	1	4	2		2	2	3	161
21					4	1	1		1	2		2	1	2	1	6	
23					2	3	4	2	1	1	3	2		1	2	2	161A
17					3		1		1	2		2	1	1		6	
8					1		1	1	2		1			1		1	161B
4					1	1								1	1		
5								1	1		1	1			1		162
3							1								2		
5								1	1		1	1			1		162A
3							1								2		
2	9	1	2		1	1	3	1	1	5			1			1	
1	1						1						1				
1	8	1	2		1	1	2	1	1	5						1	
1	1						1						1				164
1	8	1	2		1	1	2	1	1	5						1	
56	30		10	1	7	6	5	12	9	9	7	6	3	12	6	15	
33	23		8		4	4	4	7	8	8	7	2	3	6	2	9	
23	7		2	1	3	2	1	5	1	1		4		6	4	6	
2	2		2			1		2		1		1		1			165–
1	1					1									1		174
1										1							165
1															1		
	1					1											166
	1					1											
			2					1						1			168
1												1					169
	1							1									172
1					1												175
			1													1	177
1								1									179
2								1								1	
1	1									1						1	181
	1			1											1	1	

TABLE 40—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
182. Accidental drowning	M	6	2	1	1						2				
183. Accidental traumatism by firearms	M	1		1											
184. Accidental traumatism by cutting or piercing instruments	F	1	1												
185. Accidental traumatism by fall	M	8	1		2						3	1		1	
	F	7	1									1		5	
186. Accidental traumatism in mines and quarries	M	1		1											
186A. Coal mines	M	1		1											
187. Accidental traumatism by machines	M	3								1	2				
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	24	4	5	1	1				4	6	2		1	
	F	14	5	1			2			1				5	
188A. Railroad accidents	M	2								2					
	F	1								1					
188C. Automobile accidents	M	16	4	4	1					1	3	2		1	
	F	13	5	1			2							5	
188D. Aeroplane and balloon accidents	M	1		1											
188E. Injuries by other vehicles	M	2									2				
188F. Other crushing	M	3				1				1	1				
196. Other accidental electric shocks	M	2								1	1				
197-199. Homicides	M	3								3					
	F	1								1					
197. Homicide by firearms	M	1								1					
199. Homicide by other means	M	2								2					
	F	1								1					
201. Fracture (cause not specified)	M	3										1		2	
	F	4				1	1				1			1	
202. Other external violence (cause specified)	M	2		1										1	
CLASS XV.—ILL-DEFINED DISEASES.															
Total		5	1							2	1	1			
	M	3								1	1	1			
	F	2	1							1					
205. Cause of death not specified or ill-defined	M	3								1	1	1			
	F	2	1							1					
205A. Ill-defined	F	1	1												
205C. Heart failure	M	3								1	1	1			
	F	1								1					

NATIVITY, AND MONTH OF DEATH—HAMILTON, 1928.—Concluded

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
4	2						1		1	1	1	1		1			182
1																1	183
1																1	184
3	5					1		1	2	1	1		1			1	185
5	1		1		2	1						1		1	2		
			1							1							186
			1							1							186A
2	1				2									1			187
13	8		3			1	1	3	5	3	3		1	1	2	4	188
11	2		1		1		1	2	1	1		3		3		2	
			2					1	1								188A
1														1			
12	3		1			1	1		3	3	2		1	1	1	3	188C
10	2		1		1		1	2	1	1		3		2		2	
	1															1	188D
1	1							1							1		188E
	3							1	1		1						188F
	2				1						1						196
2			1				2									1	197–
	1							1									199
1							1										197
1			1				1									1	199
	1							1									
1	2					1					1			1			201
3	1							1						2		1	
2													1	1			202
4	1						1		1				2		1		
2	1						1						2				
2									1						1		
2	1						1						2				205
2									1						1		
1									1								205A
2	1						1						2				205C
1															1		

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION											
			Single						Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
DEATHS—ALL CAUSES, Total.		1,645	450	74	64	65	77	.....	10	129	223	230	.....	323	.....
	M	853	256	45	28	40	30	.....	1	55	131	158	.....	109	.....
	F	792	194	29	36	25	47	.....	9	74	92	72	.....	214	.....
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.															
Total.....		236	87	25	25	9	6	.....	3	26	18	15	.....	22	.....
	M	109	42	8	9	6	1	.....	.....	10	12	11	.....	10	.....
	F	127	45	17	16	3	5	.....	3	16	6	4	.....	12	.....
1. Typhoid and paratyphoid fever.....	M	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
1A. Typhoid fever.....	M	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
4. Undulant fever.....	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
8. Scarlet fever.....	M	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	3	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9. Whooping-cough.....	M	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	14	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10. Diphtheria.....	M	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	15	14	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11. Influenza.....	M	29	13	1	.....	.....	.....	.....	.....	1	1	8	.....	5	.....
	F	35	7	1	3	.....	5	.....	.....	6	2	3	.....	8	.....
11A. Influenza, sole cause.....	F	3	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
11B. Influenza, with phthisis..	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11C. Influenza, with bronchitis	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....
11D. Influenza, with pneumonia.....	M	15	8	.....	.....	.....	.....	.....	.....	.....	1	4	.....	2	.....
	F	12	3	1	.....	.....	.....	.....	.....	2	2	1	.....	3	.....
11E. Influenza, with other respiratory diseases.....	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11F. Influenza, with diseases and accidents of pregnancy and parturition..	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11G. Influenza, with other causes.....	M	11	4	.....	.....	.....	.....	.....	.....	1	.....	4	.....	2	.....
	F	16	3	.....	3	.....	2	.....	.....	2	.....	2	.....	4	.....
13. Mumps.....	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
21. Erysipelas.....	M	5	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	3	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22. Acute anterior poliomyelitis.....	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
23. Lethargic encephalitis....	M	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24. Meningococcus meningitis.	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25. Other epidemic and endemic diseases.....	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25A. Chicken-pox.....	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
29. Tetanus.....	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31-37. Tuberculosis.....	M	40	6	6	8	4	1	.....	.....	6	7	1	.....	1	.....
	F	52	4	13	13	3	.....	.....	3	9	3	1	.....	3	.....
31. Tuberculosis of the respiratory system.....	M	31	2	4	8	3	.....	.....	.....	5	7	1	.....	1	.....
	F	43	2	11	10	3	.....	.....	2	9	3	1	.....	2	.....
32. Tuberculosis of the meninges and central nervous system.....	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33. Tuberculosis of the intestines and peritoneum..	M	3	1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
	F	4	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....
34. Tuberculosis of the vertebral column.....	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
35. Tuberculosis of the joints.	M	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36. Tuberculosis of other organs.....	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
36D. Tuberculosis of the genito-urinary system.....	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1,369	182	38	41	15	129	126	154	145	143	137	144	123	124	124	118	178	
708	90	21	22	12	63	67	73	80	68	74	76	69	73	58	71	81	
661	92	17	19	3	66	59	81	65	75	63	68	54	51	66	47	97	
203	21	5	6	1	17	11	18	25	27	12	22	14	12	15	12	51	
91	10	3	4	1	9	7	6	14	10	7	9	8	5	6	9	19	
112	11	2	2		8	4	12	11	17	5	13	6	7	9	3	32	
2															2		1
2															2		1A
1															1		4
4								1					1	1		1	8
3							1		1							1	
3								2			1						9
14					1		2	3	2		1			3	1	1	
7	1				1	2	1		1		1	1	1				10
14		1			2		1	1	4		1		1	2		3	
25	2	2				1	1	2	2	4	2			1	1	15	11
32	3				2	1		3	5	1					1	22	
3								1								2	11A
1											1						11B
	1															1	
1																1	11C
2									1							1	
14		1						2	2	3	1			1		6	11D
12					1			1	2							8	
		1								1							11E
1																1	11F
9	2					1	1								1	8	11G
14	2				1	1		1	2	1					1	9	
1								1									13
2	3						1		2		2						21
1						1											
2											1				1		22
1			1					1							1		23
1									1								
2					1			1									24
1					1												25
1					1												25A
			1							1							29
35	3	1	1		3	3	3	3	5	1	3	7	2	3	4	3	31–37
41	8	1	2		3	2	8	4	4	3	7	6	6	4		5	
26	3	1	1		2	3	3	2	4		3	5	1	3	2	3	31
33	7	1	2		2	2	6	4	3	3	5	6	4	3		5	
2					1										1		32
1													1				
3								1	1	1							33
3	1						1				2			1			
1												1					34
1							1										
1															1		35
1													1				
1												1					36
1									1								
1												1					36D
1										1							

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Single						Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
37. Disseminated tuberculosis.	M	1	1												
	F	1	1												
37A. Disseminated tuberculosis, acute	M	1	1												
	F	1	1												
38. Syphilis	M	6	3			1					1			1	
40. Gonococcus infection	M	1				1									
41. Purulent infection, septicaemia	M	3	1							1		1			
	F	4	1	1							1			1	
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.															
Total		207	9	7	6	11	12			15	60	43		44	
	M	98	4	5	1	3	4			4	32	32		13	
	F	109	5	2	5	8	8			11	28	11		31	
43-49. Cancer	M	64		1		2	3			3	22	24		9	
	F	77	2	1	3	6	6			8	21	7		23	
43. Cancer of the buccal cavity	M	4					1							3	
	F	1												1	
44. Cancer of the stomach and liver	M	30				2	2			1	9	11		5	
	F	21				1	2				6	5		7	
45. Cancer of the peritoneum, intestines and rectum	M	8								1	4	3			
	F	9				2	1			2	2			2	
46. Cancer of the female genital organs	F	17			1	1	1			1	6	1	6		
47. Cancer of the breast	F	14					2			4	3	1		4	
48. Cancer of the skin	M	1										1			
49. Cancer of other or unspecified organs	M	21		1						1	9	9		1	
	F	15	2	1	2	2				1	4			3	
49A. Cancer of eye and ear	F	2									1			1	
49B. Cancer of circulatory system	M	3		1						1		1			
	F	2									2				
49C. Cancer of respiratory system	M	2									2				
	F	1				1									
49D. Cancer of digestive system	M	3									1	2			
	F	2				1								1	
49E. Cancer of genito-urinary organs	M	12									5	6		1	
	F	3	2		1										
49F. Cancer of bones and joints	F	2		1							1				
49G. Cancer of other specified organs	M	1									1				
	F	2			1									1	
49H. Generalized cancer	F	1								1					
50. Benign tumours and tumours not returned as malignant (tumours of female organs excepted)	M	3	1									1		1	
	F	1				1									
51. Acute rheumatic fever	M	2		1							1				
	F	3	1		1						1				
52. Chronic rheumatism, osteoarthritis, gout	F	1									1				
56. Rickets	F	1	1												
57. Diabetes mellitus	M	8		1	1						5	1			
	F	12		1						2	1	2		6	
58. Anaemia, chlorosis	M	6				1	1					3		1	
	F	6					1				2	1		2	
58A. Pernicious anaemia	M	5				1						3		1	
	F	5					1				2	1		1	
58B Other anaemias and chlorosis	M	1					1								
	F	1												1	
60. Diseases of the thyroid gland	M	3		1							1			1	
	F	5				1	1			1	2				
60A. Exophthalmic goiter	M	2		1							1				
	F	2									2				

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1													1				37
1					1												
1													1				37A
1					1												
4	1		1		2	1		2						1			38
				1	1												40
3								1		1			1				41
4										1	3						
158	31	8	9	1	13	17	16	18	12	29	19	14	20	22	14	13	
74	16	3	4	1	6	6	6	9	6	18	10	4	11	11	5	6	
84	15	5	5		7	11	10	9	6	11	9	10	9	11	9	7	
47	13	2	2		2	3	4	8	4	15	5	2	8	6	4	3	43–49
56	14	4	3		6	6	6	7	4	8	9	4	6	9	7	5	
3	1									2				1		1	43
1																1	
19	10	1			2	2	1	4	3	5	3	1	4	3	1	1	44
12	6	1	2		1		1	1	2	3	2	1	2	4	2	2	
6	1		1					1	1		1		2	1	2		45
8		1			2			1		1	1	2	1	1			
11	5	1			2	4	2	1	1	1	1	1	1	1	2		46
11	2	1				2	2	1	1	2	2			1	2	1	47
1								1									48
18	1	1	1			1	3	2		8	1	1	2	1	1	1	49
13	1		1		1		1	3		1	3		2	2	1	1	
2					1			1									49A
3							1			1					1		49B
2											1				1		
2														1		1	49C
1								1									
3							1	1				1					49D
1	1										1			1			
9	1	1	1			1	1	1		6	1		2				49E
3											1		1	1			
1		1	1										1			1	49F
1										1							49G
2								1		1							
1							1										49H
2	1				1		1									1	50
1															1		
2							1			1							51
3						1						1		1			
			1							1							52
1														1			56
6	1		1		2	1			1	1		1		1		1	57
9	1	1	1		1	1	1	1	2	1		2	2			1	
4	1		1			1				1	1		2	1			58
6						1	1					2	1		1		
3	1		1			1				1	1		2				58A
5						1	1					2	1				
1														1			58B
1															1		
3											2			1			60
5						1	1	1				1				1	
2											2						60A
2							1									1	

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
60B. Other diseases of the thyroid gland	M	1												1	
	F	3				1	1			1					
62. Diseases of the thymus	M	1	1												
	F	1	1												
64. Diseases of the spleen	M	1								1					
65. Leukaemia, lymphadenoma	M	5	1	1								3			
	F	1										1			
65A. Leukaemia	M	5	1	1								3			
65B. Lymphadenoma (Hodgkin's disease)	F	1										1			
66. Alcoholism	M	3									2			1	
66A. Delirium tremens	M	1												1	
66B. Acute alcoholism	M	2									2				
67. Chronic poisoning by mineral substances	M	1									1				
67A. Chronic lead poisoning	M	1									1				
69. Other general diseases	M	1	1												
	F	1			1										
69C. Purpura haemorrhagica	F	1			1										
69D. Others under this title	M	1	1												
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.															
Total		108	23	2	3	3	6		1	7	13	20		30	
	M	49	13	1	2	1	1			2	4	13		12	
	F	59	10	1	1	2	5		1	5	9	7		18	
70. Encephalitis	M	3	1	1	1										
70B. Encephalitis	M	3	1	1	1										
71. Meningitis	M	1	1												
	F	5	4							1					
71A. Simple meningitis	M	1	1												
	F	5	4							1					
73. Other diseases of the spinal cord	M	5										4		1	
	F	4					1			1		1		1	
74. Cerebral haemorrhage, apoplexy	M	16									1	7		8	
	F	27					3			1	8	3		12	
74A. Apoplexy	M	4										2		2	
	F	8					1				1			6	
74B. Cerebral haemorrhage	M	9									1	3		5	
	F	16					2			1	7	2		4	
74C. Cerebral thrombosis and embolism	M	3										2		1	
	F	3										1		2	
75. Paralysis without specified cause	M	5					1				2	1		1	
	F	8					1					2		5	
75A. Hemiplegia	M	4					1				2			1	
	F	5					1							4	
75B. Others under this title	M	1										1			
	F	3										2		1	
77. Other forms of mental alienation	M	2				1					1				
	F	1			1										
78. Epilepsy	M	2	2												
	F	3	1	1						1					
80. Infantile convulsions (under 5 years of age)	M	2	2												
	F	2	2												
81. Chorea	M	1	1												
82. Neuralgia and neuritis	M	1												1	
83. Softening of the brain	F	1									1				
84. Other diseases of the nervous system	M	4			1					2				1	
	F	5	2			2						1			
86. Diseases of the ear and of the mastoid process	M	7	6									1			
	F	3	1						1	1					
86A. Diseases of the ear	M	4	3									1			
	F	1							1						
86B. Diseases of the mastoid process	M	3	3												
	F	2	1							1					

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1														1			60B
3						1		1				1					
1						1											62
1						1											
1									1								64
4		1										1	1	2	1		65
1							1										
4		1										1	1	2	1		65A
1							1										65B
3					1						2						66
1											1						66A
2					1						1						66B
				1												1	67
				1												1	67A
1								1									69
1										1							
1										1							69C
1								1									69D
97	5	5	1		6	12	10	10	11	9	10	8	3	6	13	10	
45	4				3	5	6	5	4	2	2	4	2	1	9	6	
52	1	5	1		3	7	4	5	7	7	8	4	1	5	4	4	
3							1			1			1				70
3							1			1			1				70B
1							1										71
5								1	1		2					1	
1							1										71A
5								1	1		2					1	
5						1	1		1						1	1	73
4						1				1		1	1				
14	2				2	1		3	1		1	2	1		4	1	74
21		5	1		2	3	1	3	2	4	5	2			2	3	
3	1							1			1	1			1		74A
5		2	1			2		1		4						1	
9					2	1		1	1			1			2	1	74B
14		2			2	1	1	2	2		3	2			2	1	
2	1							1					1		1		74C
2		1									2					1	
5							1								2	2	75
7	1					3	2				1			2			
4							1								2	1	75A
4	1					1	1				1			2			
1																1	75B
3						2	1										
1	1					1	1										77
1									1								
2										1						1	78
3								1		1				1			
2						1	1										80
2					1					1							
1												1					81
1												1					82
1															1		83
3	1				1			1	1							1	84
5							1		2					2			
7						1		1	1		1			1	2		86
3									1			1			1		
4								1	1		1				1		86A
1															1		
3						1								1	1		86B
2									1			1					

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.															
Total		349	2	8	11	14	30	.....	1	13	59	85	.....	126	.....
	M	173	2	6	5	11	15	.....	.....	8	40	56	.....	30	.....
	F	176	.....	2	6	3	15	.....	1	5	19	29	.....	96	.....
87 90. Diseases of the heart...	M	123	2	6	5	6	11	.....	.....	7	30	36	.....	20	.....
	F	123	.....	2	6	3	10	.....	1	4	17	19	.....	61	.....
87. Pericarditis.....	M	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
88. Endocarditis and myocarditis (acute).....	M	10	.....	1	1	1	.....	.....	.....	1	4	1	.....	1	.....
	F	2	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
88A. Acute endocarditis.....	M	8	.....	1	1	.....	.....	.....	.....	1	4	1	.....	.....	.....
88B. Acute myocarditis.....	M	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
89. Angina pectoris.....	M	25	.....	.....	1	1	1	.....	.....	1	8	11	.....	2	.....
	F	11	.....	.....	.....	1	2	.....	.....	.....	1	2	.....	5	.....
90. Other diseases of the heart	M	87	2	5	3	4	10	.....	.....	4	18	24	.....	17	.....
	F	110	.....	2	5	2	8	.....	1	4	15	17	.....	56	.....
90A. Valvular disease.....	M	10	.....	2	1	.....	2	.....	.....	.....	2	3	.....	.....	.....
	F	11	.....	.....	.....	1	.....	.....	.....	.....	1	2	.....	7	.....
90D. Chronic endocarditis....	M	16	1	2	2	2	.....	.....	.....	1	2	4	.....	2	.....
	F	16	.....	1	1	.....	.....	.....	1	2	2	3	.....	6	.....
90E. Chronic myocarditis.....	M	47	.....	1	.....	1	5	.....	.....	2	11	15	.....	12	.....
	F	70	.....	.....	1	.....	8	.....	.....	1	9	11	.....	40	.....
90F. Others under this title...	M	14	1	.....	.....	1	3	.....	.....	1	3	2	.....	3	.....
	F	13	.....	1	3	1	.....	.....	.....	1	3	1	.....	3	.....
91. Diseases of the arteries...	M	49	.....	.....	.....	5	4	.....	.....	1	9	20	.....	10	.....
	F	50	.....	.....	.....	.....	4	.....	.....	1	1	10	.....	34	.....
91A. Aneurysm.....	M	4	.....	.....	.....	1	1	.....	.....	.....	1	1	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
91B. Arteriosclerosis.....	M	45	.....	.....	.....	4	3	.....	.....	1	8	19	.....	10	.....
	F	47	.....	.....	.....	.....	3	.....	.....	1	1	10	.....	32	.....
90C. Other diseases of the arteries.....	F	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.).....	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
94. Diseases of the lymphatic system (lymphangitis, etc.).....	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
95. Haemorrhage without specified cause.....	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.															
Total		128	50	4	.....	6	7	.....	1	18	14	12	.....	16	.....
	M	74	33	2	.....	5	3	.....	.....	9	11	6	.....	5	.....
	F	54	17	2	.....	1	4	.....	1	9	3	6	.....	11	.....
98. Diseases of the larynx....	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
98C. Croup.....	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
99. Bronchitis.....	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
99A. Bronchitis, acute.....	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
99D. Bronchitis, not otherwise defined, 5 years or over.	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
100. Broncho-pneumonia (including capillary bronchitis).....	M	25	19	.....	.....	1	.....	.....	.....	.....	3	1	.....	1	.....
	F	16	8	1	.....	1	1	.....	.....	.....	1	1	.....	3	.....
100A. Broncho-pneumonia....	M	24	19	.....	.....	1	.....	.....	.....	.....	3	1	.....	.....	.....
	F	16	8	1	.....	1	1	.....	.....	.....	1	1	.....	3	.....
100B. Capillary bronchitis....	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
101. Pneumonia.....	M	35	10	2	.....	3	3	.....	.....	6	5	3	.....	3	.....
	F	26	8	1	.....	.....	2	.....	1	5	1	4	.....	4	.....
101A. Pneumonia, lobar.....	M	22	4	2	.....	3	2	.....	.....	4	4	2	.....	1	.....
	F	15	6	.....	.....	.....	.....	.....	1	4	.....	2	.....	2	.....
101B. Pneumonia, not otherwise defined.....	M	13	6	.....	.....	.....	1	.....	.....	2	1	1	.....	2	.....
	F	11	2	1	.....	.....	2	.....	.....	1	1	2	.....	2	.....
102. Pleurisy.....	M	7	3	.....	.....	.....	.....	.....	.....	2	2	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
272	62	6	7	2	43	34	38	33	30	31	28	15	16	27	21	33	
138	27	3	3	2	21	19	16	17	11	20	15	10	9	10	13	12	
134	35	3	4	....	22	15	22	16	19	11	13	5	7	17	8	21	
93	22	3	3	2	14	12	9	11	7	16	13	8	7	6	11	9	87–90
93	26	2	2	....	15	10	16	14	12	6	9	3	5	11	5	17	
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	87
6	2	1	.....	1	.....	1	1	4	1..	.....	1	1	.....	1	..	.	88
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	...	1	
4	2	1	.....	1	.....	1	1	3	1	.....	1	1	.....	.....	...	.	88A
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	...	.	88B
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	...	1	
20	5	.....	.....	.....	3	3	1	2	2	4	2	.....	2	1	3	2	89
8	2	.....	1	.....	1	1	3	2	.....	.....	.....	1	.....	1	.....	2	
67	15	2	2	1	11	8	7	5	4	12	10	6	5	4	8	7	90
84	23	2	1	.....	14	9	13	12	12	6	9	2	4	10	5	14	
8	1	.....	1	.....	2	.....	.....	1	.....	.....	2	1	1	.....	2	1	90A
9	2	.....	.....	.....	2	.....	1	1	2	1	.....	.....	.....	2	1	1	
11	3	1	1	.....	.....	4	1	1	1	2	3	1	1	1	1	.....	90D
16	.....	.....	.....	.....	3	.....	2	5	1	.....	1	.....	2	1	.....	1	
36	10	1	.....	.....	7	3	5	1	3	6	2	4	3	3	4	6	90E
47	21	1	1	.....	6	8	9	5	7	5	7	2	2	6	3	10	
12	1	.....	.....	1	2	1	1	2	.....	4	3	.....	.....	.....	1	.....	90F
12	.....	1	.....	.....	3	1	1	1	2	.....	1	.....	.....	1	1	2	
44	5	.....	.....	.....	6	7	7	6	4	4	2	2	2	4	2	3	91
38	9	1	2	.....	6	5	6	2	7	5	4	2	2	6	1	4	
4	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	1	.....	91A
2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	
40	5	.....	.....	.....	6	6	7	5	3	4	2	2	2	4	1	3	91B
35	9	1	2	.....	5	4	6	2	7	5	4	2	2	5	1	4	
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	91C
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	93
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	94
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	95
198	14	1	3	2	9	12	14	8	15	14	2	1	5	21	7	20	
60	10	1	2	1	5	5	8	5	12	8	2	1	4	11	3	10	
48	4	.....	1	1	4	7	6	3	3	6	.....	.....	1	10	4	10	
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98C
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	99
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	99A
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	99D
21	2	1	.....	1	2	.....	3	2	3	3	.....	.....	3	6	2	1	100
13	2	.....	.....	1	2	2	2	.....	2	1	.....	.....	1	3	1	2	
21	1	1	.....	1	2	.....	3	1	3	3	.....	.....	3	6	2	1	100A
13	2	...	.....	1	2	2	2	.....	2	1	.....	.....	1	3	1	2	
.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	100B
28	5	.....	2	.....	2	3	4	2	4	4	2	1	1	4	.....	8	101
24	1	.....	1	.....	1	3	4	3	1	1	.....	.....	.....	5	2	6	
19	2	.....	1	.....	1	1	3	1	2	3	1	1	1	4	.....	4	101A
14	.....	.....	1	.....	1	.....	2	2	1	.....	.....	.....	.....	4	1	4	
9	3	.....	1	.....	1	2	1	1	2	1	1	.....	.....	.....	.....	4	101B
10	1	.....	.....	.....	.....	3	2	1	.....	1	.....	.....	.....	1	1	2	
5	2	.....	.....	.....	1	1	.....	.....	2	1	.....	.....	.....	.....	1	1	102
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
103. Congestion and haemorrhagic infarct of the lung	M	1												1	
	F	5								1	1			3	
104. Gangrene of the lung	M	1								1					
105. Asthma	M	3				1					1	1			
	F	1								1					
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1										1			
	F	3					1			1				1	
107c. Others under this title	M	1										1			
	F	3					1			1				1	
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.															
Total		216	114	10	7	7	6		1	18	24	12		17	
	M	123	67	10	3	2	3		1	12	10	8		7	
	F	93	47		4	5	3			6	14	4		10	
108. Diseases of the mouth and annexa	M	4	1		1						1			1	
	F	1								1					
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	2	1											1	
	F	3	1				1					1			
109A. Adenoid vegetations	M	1												1	
	F	1										1			
109B. Pharynx and tonsils	M	1	1												
	F	2	1			1									
111. Ulcer of the stomach and duodenum	M	9		1		1				3	2	1		1	
	F	1				1									
111A. Ulcer of the stomach	M	8		1		1				2	2	1		1	
	F	1				1									
111B. Ulcer of the duodenum	M	1								1					
112. Other diseases of the stomach (cancer excepted)	M	11	2				1			2	1	4		1	
	F	5	2			1					1			1	
113. Diarrhoea and enteritis (under 2 years of age)	M	52	52												
	F	38	38												
114. Diarrhoea and enteritis (2 years or over)	M	2	2												
	F	5				1	1			2	1				
117. Appendicitis and typhlitis	M	23	5	9	1	1				5	2				
	F	9	5		1					1	2				
118. Hernia, intestinal obstruction	M	10	3		1		1			1	1	2		1	
	F	9			2		1			1		1		4	
118A. Hernia	M	5	1				1			1	1	1			
	F	3					1							2	
118B. Intestinal obstruction	M	5	2		1							1		1	
	F	6			2					1		1		2	
119. Other diseases of the intestines	F	3				1								2	
122. Cirrhosis of the liver	M	3					1							2	
	F	7				1					4	1		1	
122B. Not specified as alcoholic	M	3					1							2	
	F	7				1					4	1		1	
123. Biliary calculi	M	1								1					
	F	3									2			1	
124. Other diseases of the liver	M	3									2	1			
	F	4									2	1		1	
125. Diseases of the pancreas	M	1									1				
	F	1								1					
126. Peritonitis without specified cause	M	2	1						1						
	F	4	1		1						2				

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
1									1								103
4	1					1				1				1	1	1	
	1													1			104
3							1	1	1								105
1										1							
1						1											107
3						1				2							
1						1											107c
3						1				2							
188	18	3	4	3	13	13	15	20	13	5	22	44	35	12	16	8	
108	8	3	2	2	6	6	8	12	9	1	11	25	23	5	12	5	
80	10		2	1	7	7	7	8	4	4	11	19	12	7	4	3	
2	2							1			1	1		1			108
	1				1												
2							1	1									109
2	1				2	1											
1							1										109A
1						1											
1								1									109B
1	1				2												
7	2				2		1	1	1		1		1		2		111
	1					1											
6	2				2		1	1	1		1		1		1		111A
	1					1											
1															1		111B
10		1			1			3	1		3	1		1	1		112
4	1						1	2							1	1	
49		1		2	1	2	1		1		3	20	17	3	2	2	113
37				1	1	1			1		3	15	11	3	3		
2									1		1						114
4	1					1	1	1			1			1			
20	2	1				3	3	2	3		1	2	2		5	2	117
8	1				1	2		2	1	1	1					1	
8	1		1				2	2	1		1	1	3				118
7	1		1				2	1	1		1	1		2		1	
4			1				1	2				1	1				118A
2			1				2							1			
4	1						1		1		1		2				118B
5	1							1	1		1	1		1		1	
2			1			1				1	1						119
3						1		1	1								122
4	3				2		2				1	2					
3						1		1	1								122B
4	3				2		2				1	2					
			1												1		123
3								1	1					1			
2	1				1			1		1							124
4							1	1			1	1					125
1					1												
1											1						
2															1	1	126
4										2	1		1				

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Single						Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.															
Total		129	3	3	6	11	6	....	1	15	19	26	....	39	....
	M	74	2	2	4	10	1	....	....	3	10	20	....	22	....
	F	55	1	1	2	1	5	....	1	12	9	6	....	17	....
128. Acute nephritis (including unspecified, under 10 years of age)	M	7	1	1	3	1	....	....	....	....	1	....	....	....	....
	F	6	....	....	1	....	1	....	....	3	1	....	....	....	....
129. Chronic nephritis (Bright's Disease	M	43	....	1	....	9	....	....	....	3	6	11	....	13	....
	F	35	....	....	....	1	4	....	1	3	6	5	....	15	....
131. Other diseases of the kidneys and annexa	M	2	....	....	....	....	....	....	....	....	....	1	....	1	....
	F	2	1	....	....	....	....	....	....	....	....	1	....	....	....
132. Calculi of the urinary passages	M	3	....	....	....	....	....	....	....	....	1	....	....	2	....
133. Diseases of the bladder	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....
135. Diseases of the prostate	M	17	....	....	1	....	1	....	....	....	2	8	....	5	....
136. Non-venereal diseases of the male genital organs	M	1	1	....	....	....	....	....	....	....	....	....	....	....	....
137. Cysts and other benign tumours of the ovary	F	3	....	....	....	....	....	....	....	3	....	....	....	....	....
138. Salpingitis and pelvic abscess	F	4	....	....	....	....	....	....	....	2	1	....	....	1	....
139. Benign tumours of the uterus	F	3	....	....	....	....	....	....	....	1	1	....	....	1	....
140. Non-puerperal uterine haemorrhage	F	1	....	1	....	....	....	....	....	....	....	....	....	....	....
141. Other diseases of the female genital organs	F	1	....	....	1	....	....	....	....	....	....	....	....	....	....
CLASS VIII.—THE PUERPERAL STATE.															
Total	F	13	....	3	....	....	....	....	2	8	....	....	....	....	....
145. Other accidents of labour	F	1	....	....	....	....	....	....	....	1	....	....	....	....	....
145c. Other surgical operations and instrumental delivery	F	1	....	....	....	....	....	....	....	1	....	....	....	....	....
146. Puerperal septicaemia	F	4	....	2	....	....	....	....	....	2	....	....	....	....	....
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	1	....	....	....	....	....	....	....	1	....	....	....	....	....
148. Puerperal albuminuria and convulsions	F	6	....	1	....	....	....	....	2	3	....	....	....	....	....
149. Following childbirth (not otherwise defined)	F	1	....	....	....	....	....	....	....	1	....	....	....	....	....
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.															
Total		7	3	....	....	....	....	....	....	....	1	....	....	3	....
	M	3	2	....	....	....	....	....	....	....	....	....	....	1	....
	F	4	1	....	....	....	....	....	....	....	1	....	....	2	....
151. Gangrene	F	1	....	....	....	....	....	....	....	....	....	....	....	1	....
152. Furuncle	F	1	1	....	....	....	....	....	....	....	....	....	....	....	....
153. Acute abscess	M	1	....	....	....	....	....	....	....	....	....	....	....	1	....
	F	2	....	....	....	....	....	....	....	....	1	....	....	1	....
154. Other diseases of the skin and annexa	M	2	2	....	....	....	....	....	....	....	....	....	....	....	....

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
		Foreign															
Canada	British	USA	Other	Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
98	21	3	4	3	12	10	16	11	11	11	12	3	16	5	14	8	
57	10	2	3	2	8	7	7	6	6	5	8	2	10	2	6	7	
41	11	1	1	1	4	3	9	5	5	6	4	1	6	3	8	1	
5	1			1	1		1				2		1		1	1	128
5	1				1	1			2						2		
36	3	1	2	1	4	5	5	4	4	3	3	1	4	2	4	4	129
24	9		1	1	2	1	7	4	3	3	4	1	2	2	6		
1			1					1								1	131
1	1					1							1				
3						1			1							1	132
	1												1				133
11	5	1			3	1		1	1	2	3	1	4		1		135
1							1										136
2		1								2						1	137
4					1		1			1				1			138
3							1						2				139
1								1									140
1													1				141
11	2					2	1	4			4				1	1	
1											1						145
1											1						145c
3	1						1	1			2						146
1															1		147
6						2		2			1					1	148
	1							1									149
6		1					1	2					1	1	1	1	
3													1	1	1		
3		1					1	2								1	
1								1									151
1							1										152
1															1		153
1		1						1								1	
2													1	1			154

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION,															
Total		7	2	1		1	1			1	1				
	M	3		1			1			1					
	F	4	2			1					1				
155. Diseases of the bones (mastoid and tuberculosis excepted)	M	3		1			1			1					
	F	1	1												
156. Diseases of the joints (tuberculosis and rheumatism excepted)	F	3	1			1					1				
CLASS XI.—MALFORMATIONS.															
Total		21	21												
	M	11	11												
	F	10	10												
159. Congenital malformations (stillbirths not included)	M	11	11												
	F	10	10												
159A. Congenital hydrocephalus	F	1	1												
159B. Congenital malformations of the heart	M	6	6												
	F	3	3												
159C. Others under this title	M	5	5												
	F	6	6												
CLASS XII.—DISEASES OF EARLY INFANCY.															
Total		118	118												
	M	68	68												
	F	50	50												
160. Congenital debility, icterus and sclerema	M	14	14												
	F	6	6												
161. Premature birth, injury at birth	M	50	50												
	F	40	40												
161A. Premature birth	M	40	40												
	F	37	37												
161B. Injury at birth	M	10	10												
	F	3	3												
162. Other diseases peculiar to early infancy	M	4	4												
	F	4	4												
162A. Specified diseases	M	4	4												
	F	4	4												
CLASS XIII.—OLD AGE.															
Total		13										6		7	
	M	6										4		2	
	F	7										2		5	
164. Senility	M	6										4		2	
	F	7										2		5	
CLASS XIV.—EXTERNAL CAUSES															
Total		82	17	10	6	3	2			8	13	8		15	
	M	56	11	9	4	2	1			6	11	6		6	
	F	26	6	1	2	1	1			2	2	2		9	
165-174. Suicides	M	3									3				

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
7	.....	.....	.....	.....	1	1	.....	2	.....	.....	.....	1	1	1	.....	.....	
3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	
4	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	
3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	155
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
3	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	156
21	.....	.....	.....	.....	2	1	2	2	4	1	2	.....	1	1	3	2	
11	.....	.....	.....	.....	.....	1	1	2	2	.....	1	.....	.....	1	2	1	
10	.....	.....	.....	.....	2	.....	1	.....	2	1	1	.....	1	.....	1	1	
11	.....	.....	.....	.....	.....	1	1	2	2	.....	1	.....	.....	1	2	1	159
10	.....	.....	.....	.....	2	.....	1	.....	2	1	1	.....	1	.....	1	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	159A
6	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	1	2	.....	159B
3	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	
5	.....	.....	.....	.....	.....	1	.....	1	1	.....	1	.....	.....	.....	.....	1	159C
6	.....	.....	.....	.....	1	.....	.....	.....	2	.....	1	.....	1	.....	1	.....	
117	.....	.....	.....	1	7	8	14	3	11	16	8	13	6	7	9	16	
67	.....	.....	.....	1	1	6	9	3	6	8	5	6	1	5	8	10	
50	.....	.....	.....	.....	6	2	5	.....	5	8	3	7	5	2	1	6	
14	.....	.....	.....	.....	.....	1	.....	.....	.....	1	1	2	1	2	3	3	160
6	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	2	1	.....	.....	1	
49	.....	.....	.....	1	1	4	8	3	6	7	4	4	.....	3	4	6	161
40	.....	.....	.....	.....	5	2	5	.....	4	6	2	5	4	2	.....	5	
39	.....	.....	.....	1	.....	3	5	3	4	7	4	4	.....	2	3	5	161A
37	.....	.....	.....	.....	5	1	5	.....	4	6	2	5	2	2	.....	5	
10	.....	.....	.....	.....	1	1	3	.....	2	.....	.....	.....	.....	1	1	1	161B
3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	
4	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	1	162
4	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	1	.....	
4	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	1	1	162A
4	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	1	.....	
10	1	1	1	.....	.....	.....	2	3	1	1	.....	3	.....	.....	1	2	
4	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	3	.....	.....	.....	1	
6	.....	.....	1	.....	.....	.....	2	1	1	1	.....	.....	.....	.....	1	1	
4	1	1	.....	.....	.....	.....	.....	2	.....	.....	.....	3	.....	.....	.....	1	164
6	.....	.....	1	.....	.....	.....	2	1	1	1	.....	.....	.....	.....	1	1	
63	6	5	6	2	6	5	7	2	6	7	15	7	7	6	4	10	
41	4	5	4	2	4	5	6	2	1	4	13	6	5	5	2	3	
22	2	.....	2	.....	2	.....	1	.....	5	3	2	1	2	1	2	7	
2	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	165–174

TABLE 41—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
166. Suicide by corrosive substances	M	1									1				
169. Suicide by drowning	M	1									1				
171. Suicide by cutting or piercing instruments	M	1									1				
179. Accidental burns and scalds (conflagration excepted)	M	4	3							1					
	F	6	3	1	1					1					
180. Accidental mechanical suffocation	F	1												1	
180B. Asphyxia	F	1												1	
181. Accidental absorption of irrespirable or poisonous gas	M	1					1								
182. Accidental drowning	M	7	2	4						1					
	F	1									1				
183. Accidental traumatism by firearms	M	2			1						1				
185. Accidental traumatism by fall	M	12	3	2						1	2	2		2	
	F	3										1		2	
187. Accidental traumatism by machines	M	1				1									
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.	M	17	2	3	1	1				3	4	2		1	
	F	9	2		1		1			1	1			3	
188A. Railroad accidents	M	2								1	1				
188B. Street car accidents	M	1										1			
	F	1									1				
188C. Automobile accidents	M	10	2	2	1	1				1	1	1		1	
	F	7	1		1		1			1				3	
188E. Injuries by other vehicles	M	3		1							2				
	F	1	1												
188F. Other crushing	M	1								1					
192, Starvation (deprivation of food or water)	F	1				1									
194. Excessive heat	M	1												1	
196. Other accidental electric shocks	M	2			1									1	
197-199 Homicides	M	1	1												
199. Homicide by other means	M	1	1												
201. Fracture (cause not specified)	M	1										1			
	F	4										1		3	
202, Other external violence (cause specified)	M	4			1						1	1		1	
	F	1	1												
CLASS XV.—ILL-DEFINED DISEASES.															
Total		11	1	1			1				1	3		4	
	M	6	1	1							1	2		1	
	F	5					1					1		3	
204. Sudden death	M	1	1												
205. Cause of death not specified or ill-defined	M	5		1							1	2		1	
	F	5					1					1		3	
205B. Not specified or unknown	M	1		1											
205C. Heart failure	M	4									1	2		1	
	F	5					1					1		3	

NATIVITY, AND MONTH OF DEATH—OTTAWA, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	166
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	169
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	171
3	.....	.....	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	1	179
5	.....	.....	1	.....	.....	.....	1	.....	1	.....	1	.....	.....	.....	1	2	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	180
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	180B
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	181
4	1	2	.....	.....	.....	.....	.....	.....	.....	.....	5	2	.....	.....	.....	.....	182
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	183
9	2	1	.....	.....	.....	1	2	.....	.....	.....	1	2	2	2	.....	2	185
3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	187
15	.....	1	1	.....	.....	3	1	.....	.....	1	5	2	3	1	1	.....	188
7	1	.....	1	.....	2	.....	.....	.....	.....	1	.....	1	1	1	.....	3	
1	.....	.....	1	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	188A
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	188B
.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
9	.....	1	.....	.....	.....	1	.....	.....	.....	1	3	1	3	.....	1	.....	188C
6	1	.....	.....	.....	1	.....	.....	.....	.....	1	.....	1	1	1	.....	2	
3	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	188E
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	188F
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	192
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	194
1	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	196
.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	197–199
.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	199
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	201
4	.....	.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	.....	1	
2	.....	.....	2	.....	1	1	1	.....	1	.....	.....	.....	.....	.....	.....	.....	202
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	
10	1	.....	.....	.....	.....	.....	.....	2	2	1	.....	.....	1	.....	2	3	
6	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1	.....	1	1	
4	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	2	
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	204
5	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	1	1	205
4	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	2	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	205B
4	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	.....	1	205C
4	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	2	

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION.

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
DEATHS—ALL CAUSES. **Total**		**1,122**	**127**	**32**	**29**	**58**	**89**	.....	**10**	**78**	**178**	**189**	.....	**332**	.....
	M	549	75	23	21	28	35	.....	1	34	88	127	.....	117	.....
	F	573	52	9	8	30	54	.....	9	44	90	62	.....	215	.....
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES. **Total**		148	25	10	7	9	10	.....	5	22	18	13	.....	29	.....
	M	74	12	7	6	3	3	.....	.....	10	11	10	.....	12	.....
	F	74	13	3	1	6	7	.....	5	12	7	3	.....	17	.....
7. Measles	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8. Scarlet fever	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9. Whooping-cough	M	4	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
10. Diphtheria	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11. Influenza	M	33	2	2	1	.....	.....	.....	.....	5	6	8	.....	9	.....
	F	39	3	2	.....	4	3	.....	1	7	4	3	.....	12	.....
11A. Influenza, sole cause	M	3	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	1	.....
	F	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
11B. Influenza, with phthisis	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11D. Influenza, with pneumonia	M	20	2	1	1	.....	.....	.....	.....	3	3	4	.....	6	.....
	F	28	2	1	.....	3	3	.....	1	5	4	2	.....	7	.....
11E, Influenza, with other respiratory diseases	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
11F. Influenza, with diseases and accidents of pregnancy and parturition	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
11G. Influenza, with other causes	M	8	.....	.....	.....	.....	.....	.....	.....	1	3	3	.....	1	.....
	F	7	.....	1	.....	1	.....	.....	.....	1	.....	1	.....	3	.....
21. Erysipelas	M	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
22. Acute anterior poliomyelitis	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
23. Lethargic encephalitis	M	4	1	.....	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....
	F	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
24. Meningococcus meningitis	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25. Other epidemic and endemic diseases	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25A. Chicken-pox	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31-37. Tuberculosis	M	23	.....	4	4	3	1	.....	.....	5	4	1	.....	1	.....
	F	22	2	1	1	2	4	.....	4	5	1	.....	.....	2	.....
31. Tuberculosis of the respiratory system	M	20	.....	3	3	3	1	.....	.....	5	4	1	.....	.....	.....
	F	17	.....	1	1	2	4	.....	3	4	1	.....	.....	1	.....
32. Tuberculosis of the meninges and central nervous system	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33. Tuberculosis of the intestines and peritoneum	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....
34. Tuberculosis of the vertebral column	M	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
35. Tuberculosis of the joints	M	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
37. Disseminated tuberculosis	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
37A. Disseminated tuberculosis, acute	F	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
38, Syphilis	M	2	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
41. Purulent infection, septicaemia	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—LONDON, 1928

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
744	**303**	**31**	**28**	**16**	**67**	**84**	**103**	**106**	**113**	**100**	**84**	**70**	**80**	**92**	**97**	**126**	
374	141	6	20	8	30	43	54	52	61	47	36	38	35	51	47	55	
370	162	25	8	8	37	41	49	54	52	53	48	32	45	41	50	71	
102	38	3	3	2	8	4	15	15	21	14	9	9	9	7	8	29	
52	17	1	3	1	4	2	7	10	8	7	4	4	5	4	6	13	
50	21	2	.....	1	4	2	8	5	13	7	5	5	4	3	2	16	
2	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	7
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	8
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	1	9
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	
1	1	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	10
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
22	9	.....	2	.....	1	.....	3	3	5	4	4	2	.....	.....	2	9	11
26	13	.....	.....	.....	.....	.....	3	2	8	5	3	1	2	1	1	13	
1	1	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	1	11A
2	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	11B
13	6	.....	1	.....	1	.....	2	3	3	2	3	1	.....	.....	.....	5	11D
18	10	.....	.....	.....	.....	.....	1	1	6	3	2	1	1	.....	1	12	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	11E
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	11F
6	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....	.....	2	3	11G
5	2	.....	.....	.....	.....	.....	.....	1	2	1	1	.....	.....	1	.....	1	
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	21
2	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	22
4	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	2	1	.....	.....	23
1	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	24
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	25
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	25A
16	5	.....	1	1	3	.....	2	6	2	2	.....	.....	2	3	1	2	31–37
13	6	2	.....	1	3	.....	4	1	5	1	1	2	1	2	1	1	
13	5	.....	1	1	3	.....	2	6	2	.....	.....	.....	2	2	1	2	31
10	4	2	.....	1	3	.....	3	1	4	.....	1	1	1	1	1	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	32
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	33
1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	34
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	35
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	37
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	37A–
1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	38
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	
.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.															
Total		191	6	2	3	17	9	.....	.....	12	57	38	.....	47	.....
	M	88	2	1	2	10	3	.....	.....	5	24	27	.....	14	.....
	F	103	4	1	1	7	6	.....	.....	7	33	11	.....	33	.....
43-49. Cancer	M	62	.....	1	1	6	3	.....	.....	5	17	18	.....	11	.....
	F	74	.....	.....	1	6	6	.....	.....	3	23	9	.....	26	.....
43. Cancer of the buccal cavity	M	5	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	2	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
44. Cancer of the stomach and liver	M	18	.....	.....	.....	3	1	.....	.....	1	4	6	.....	3	.....
	F	24	.....	.....	.....	1	3	.....	.....	2	4	3	.....	11	.....
45. Cancer of the peritoneum, intestines and rectum	M	13	.....	.....	.....	.....	.....	.....	.....	2	3	6	.....	2	.....
	F	14	.....	.....	.....	2	1	.....	.....	.....	6	.....	.....	5	.....
46. Cancer of the female genital organs	F	11	.....	.....	.....	1	.....	.....	.....	.....	4	3	.....	3	.....
47. Cancer of the breast	F	14	.....	.....	.....	2	1	.....	.....	.....	6	2	.....	3	.....
48. Cancer of the skin	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
49. Cancer of other or unspecified organs	M	26	.....	1	1	3	1	.....	.....	2	9	5	.....	4	.....
	F	9	.....	.....	1	.....	1	.....	.....	1	2	1	.....	3	.....
49A. Cancer of eye and ear	F	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
49B. Cancer of circulatory system	M	2	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....
49C. Cancer of respiratory system	M	3	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....
49D. Cancer of digestive system	M	3	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	.....
	F	3	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	2	.....
49E. Cancer of genito-urinary organs	M	15	.....	1	.....	2	.....	.....	.....	.....	6	4	.....	2	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
49F. Cancer of bones and joints	M	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
49H. Generalized cancer	M	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
51. Acute rheumatic fever	M	3	1	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
	F	2	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
52. Chronic rheumatism, osteoarthritis, gout	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
57. Diabetes mellitus	M	9	.....	.....	.....	.....	.....	.....	.....	.....	1	6	.....	2	.....
	F	9	1	.....	.....	.....	.....	.....	.....	1	3	1	.....	3	.....
58. Anaemia, chlorosis	M	4	.....	.....	.....	2	.....	.....	.....	.....	1	1	.....	.....	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	1	.....
58A. Pernicious anaemia	M	4	.....	.....	.....	2	.....	.....	.....	.....	1	1	.....	.....	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	2	1	1	.....	1	.....
60. Diseases of the thyroid gland	M	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	6	.....	.....	.....	1	.....	.....	.....	1	2	.....	.....	2	.....
60A. Exophthalmic goiter	M	2	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	4	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	1	.....
60B. Other diseases of the thyroid gland	F	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
62. Diseases of the thymus	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
63. Diseases of the adrenals (Addison's disease)	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
65. Leukaemia, lymphadenoma	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
65A Leukaemia	M	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
	F	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
66. Alcoholism	M	3	.....	.....	.....	2	.....	.....	.....	.....	1	.....	.....	.....	.....
66B. Acute alcoholism	M	2	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....
66C. Chronic alcoholism	M	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
69. Other general diseases	F	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....
69D. Others under this title	F	2	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
118	60	9	2	2	13	14	19	15	21	17	12	12	16	17	20	15	
53	30	3	.....	2	3	8	9	7	13	8	3	7	7	9	9	5	
65	30	6	2	.....	10	6	10	8	8	9	9	5	9	8	11	10	
36	21	3	.....	2	3	8	5	5	7	6	2	4	6	4	8	4	43–49
43	23	6	2	.....	8	4	6	6	5	7	6	3	7	7	9	6	
4	.....	1	.....	.....	.....	.....	.....	.....	3	.....	.....	1	.....	1	.....	.....	43
.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
9	8	1	.....	.....	2	2	4	.....	2	.....	.....	.....	3	1	2	2	44
14	8	1	1	.....	2	2	2	2	2	3	2	.....	2	3	2	2	
7	6	.....	.....	.....	1	3	.....	2	.....	2	1	.....	1	.....	3	.....	45
6	5	3	.....	.....	1	1	.....	.....	.....	2	2	1	1	2	3	1	
7	2	1	1	.....	2	.....	1	2	.....	.....	.....	1	2	.....	2	1	
10	4	.....	.....	.....	2	1	2	1	2	1	1	1	1	1	1	.....	47
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	48
16	7	1	.....	2	.....	3	1	3	2	4	1	3	2	2	3	2	49
5	3	1	.....	.....	.....	.....	1	1	.....	1	1	.....	1	1	1	2	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	49A
.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	49B
.....	3	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	49C
1	1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	
2	1	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	49D
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	2	
12	2	.....	.....	1	.....	2	1	.....	1	2	1	1	2	2	2	1	49E
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	
1	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	49F
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	49H
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	50
.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	2	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1	51
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	52
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	
5	4	.....	.....	.....	.....	.....	.....	1	1	1	.....	2	.....	3	1	.....	57
7	2	.....	.....	.....	.....	1	3	1	.....	1	1	1	.....	.....	.....	1	
2	2	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	.....	1	.....	.....	58
3	2	.....	.....	.....	.....	1	1	.....	2	.....	.....	.....	1	.....	.....	.....	
2	2	.....	.....	.....	.....	.....	1	1	.....	.....	1	.....	.....	1	.....	.....	58A
3	2	.....	.....	.....	.....	1	1	.....	2	.....	.....	.....	1	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	60
5	1	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....	1	.....	2	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	60A
4	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	60B
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	62
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	65
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	65A
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	
2	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	66
1	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	66B
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	66C
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	69
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	69D

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married						
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated	Widowed	Not stated
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.															
Total		85	7	3	2	4	10	.....	.....	7	9	13	.....	30	.....
	M	44	7	3	1	2	2	.....	.....	3	6	9	.....	11	.....
	F	41	.....	.....	1	2	8	.....	.....	4	3	4	.....	19	.....
70. Encephalitis	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
70B. Encephalitis	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
	F	2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
71. Meningitis	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
71A. Simple meningitis	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
73. Other diseases of the spinal cord	M	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
	F	6	.....	.....	.....	1	1	.....	.....	1	.....	2	.....	1	.....
74. Cerebral haemorrhage, apoplexy	M	15	.....	1	.....	.....	.....	.....	.....	.....	2	6	.....	6	.....
	F	15	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	9	.....
74A. Apoplexy	M	6	.....	.....	.....	.....	.....	.....	.....	.....	1	2	.....	3	.....
	F	8	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	5	.....
74B. Cerebral haemorrhage	M	8	.....	1	.....	.....	.....	.....	.....	.....	1	4	.....	2	.....
	F	7	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	4	.....
74C. Cerebral thrombosis and embolism	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
75. Paralysis without specified cause	M	3	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	2	.....
	F	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	4	.....
75A. Hemiplegia	M	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	2	.....
75B. Others under this title	M	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
76. General paralysis of the insane	M	8	.....	.....	.....	1	.....	.....	.....	2	3	1	.....	1	.....
	F	2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....
77. Other forms of mental alienation	M	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
78. Epilepsy	M	4	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....
	F	4	.....	.....	.....	1	.....	.....	.....	.....	1	1	.....	1	.....
79. Convulsions (non-puerperal 5 years or over)	M	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
80. Infantile convulsions (under 5 years of age)	M	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
82. Neuralgia and neuritis	F	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
84. Other diseases of the nervous system	M	3	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....
86. Diseases of the ear and of the mastoid process	M	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	1	.....
86A. Diseases of the ear	F	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
86B. Diseases of the mastoid process	M	3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.															
Total		268	1	1	2	13	25	.....	.....	5	34	70	.....	117	.....
	M	120	1	1	2	8	13	.....	.....	3	17	40	.....	35	.....
	F	148	.....	.....	.....	5	12	.....	.....	2	17	30	.....	82	.....
87-90. Diseases of the heart	M	77	1	1	1	4	7	.....	.....	1	14	31	.....	17	.....
	F	89	.....	.....	.....	5	7	.....	.....	2	12	23	.....	40	.....
88. Endocarditis and myocarditis (acute)	M	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....
88B. Acute myocarditis	M	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	F	3	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	.....
89. Angina pectoris	M	15	.....	.....	.....	.....	.....	.....	.....	1	2	9	.....	3	.....
	F	13	.....	.....	.....	1	1	.....	.....	.....	2	6	.....	3	.....
90. Other diseases of the heart	M	61	1	1	.....	4	7	.....	.....	.....	12	22	.....	14	.....
	F	73	.....	.....	.....	4	6	.....	.....	2	9	16	.....	36	.....
90A. Valvular disease	M	4	1	.....	.....	.....	.....	.....	.....	.....	1	2	.....	.....	.....
	F	7	.....	.....	.....	.....	1	.....	.....	.....	1	1	.....	4	.....

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Continued

NATIVITY					MONTHS												
		Foreign															
Canada	British	USA	Other	Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
61	19	3	2	.....	2	5	9	12	8	8	5	4	8	4	5	15	
32	10	.....	2	.....	1	4	4	6	6	5	1	1	3	2	3	8	
29	9	3	.....	.....	1	1	5	6	2	3	4	3	5	2	2	7	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	70
1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	70B
1	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	71
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	71A
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	73
5	1	.....	.....	.....	.....	1	1	3	.....	.....	.....	.....	1	.....	.....	.....	
9	6	.....	.....	.....	.....	1	.....	3	2	3	.....	.....	2	.....	.....	4	74
10	3	2	.....	.....	1	.....	2	.....	.....	1	2	3	2	2	1	1	
2	4	.....	.....	.....	.....	1	.....	1	2	.....	.....	.....	.....	.....	.....	2	74A
6	2	.....	.....	.....	.....	.....	1	.....	.....	1	.....	1	1	2	1	1	
6	2	.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	2	.....	.....	2	74B
4	1	2	.....	.....	1	.....	1	.....	.....	.....	2	2	1	.....	.....	.....	
1	.....	.....	.....	.....	.. .	.. .	.. .	.. .	....	1	.. .	.. .	.. .	.. .	.. .	.. .	74C
1	2	.. .	.....	.....	1	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	75
4	1	.....	.....	.....	.....	.....	.....	2	1	1	1	.....	.....	.....	.....	.....	
.....	2	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	75A
2	1	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	75B
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	
5	1	.....	2	.....	.....	1	1	1	1	.....	.....	.....	.....	2	2	.....	76
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	
2	. . .	.. .	.. .	.. .	.. .	.. .	.. .	.. .	1	.. .	.. .	.. .	.. .	.. .	.. .	1	77
1	. . .	.. .	.. .	.. .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
3	1	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	1	78
4	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	
1	.....	.....	.....	.....	.....	... .	1	. . .	.....	.....	.....	.....	.....	.....	.....	.....	79
2	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	80
.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
3	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	84
.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	
3	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	86
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	1	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	86A
3	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	86B
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	
159	86	11	7	5	20	25	25	28	19	24	21	18	24	15	23	26	
71	40	1	5	3	12	12	18	9	8	4	11	10	10	4	11	11	
88	46	10	2	2	8	13	7	19	11	20	10	8	14	11	12	15	
45	26	.....	4	2	4	8	13	5	7	3	5	5	10	2	8	7	87–90
55	25	6	1	2	2	8	6	13	8	12	4	2	10	6	6	12	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	88
1	1	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	88B
1	1	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	.....	.....	
11	3	.....	1	.....	2	1	3	2	.....	1	1	1	1	.....	2	1	89
10	3	.....	.....	.....	.....	3	1	.....	1	1	1	.....	2	1	1	2	
33	23	.....	3	2	2	7	10	3	7	2	4	4	9	2	6	5	90
44	21	5	1	2	2	4	4	13	7	11	2	2	8	5	5	10	
2	2	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	1	.....	.....	.....	90A
5	2	.....	.....	.....	.....	.....	.....	1	.....	3	.....	1	.....	.....	1	1	

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
90D. Chronic endocarditis	M	4									1	3			
	F	12				1	1				3	2		5	
90E. Chronic myocarditis	M	36				3	4				7	12		10	
	F	40				3	4				3	8		22	
90F. Others under this title	M	17		1		1	3				3	5		4	
	F	14								2	2	5		5	
91. Diseases of the arteries	M	40				3	6			2	2	9		18	
	F	56					5				5	6		40	
91A. Aneurysm	F	1									1				
91B. Arteriosclerosis	M	40				3	6			2	2	9		18	
	F	55					5				4	6		40	
92. Embolism and thrombosis (not cerebral)	M	3			1	1					1				
	F	2										1		1	
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	F	1												1	
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.															
Total		96	15	1	8	4	6			7	13	10		32	
	M	44	7		5	2				3	7	8		12	
	F	52	8	1	3	2	6			4	6	2		20	
98. Diseases of the larynx	F	1	1												
98C. Croup	F	1	1												
99. Bronchitis	M	1	1												
	F	1	1												
99A. Bronchitis, acute	M	1	1												
	F	1	1												
100. Broncho-pneumonia (including capillary bronchitis)	M	7	2							1		3		1	
	F	20	1	1		2	2				2	1		11	
100A. Broncho-pneumonia	M	7	2							1		3		1	
	F	20	1	1		2	2				2	1		11	
101. Pneumonia	M	32	4		3	2				2	6	5		10	
	F	23	4		2		4			3	3	1		6	
101A. Pneumonia, lobar	M	18	1		3	2				1	4	2		5	
	F	13	1		2		2			2	3			3	
101B. Pneumonia, not otherwise defined	M	14	3							1	2	3		5	
	F	10	3				2			1		1		3	
102. Pleurisy	M	2			2										
	F	2	1		1										
103. Congestion and haemorrhagic infarct of the lung	M	1												1	
	F	2									1			1	
105. Asthma	F	2												2	
107. Other diseases of the respiratory system (tuberculosis excepted)	M	1									1				
	F	1								1					
107C. Others under this title	M	1									1				
	F	1								1					
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.															
Total		75	16	8	1	4	8			6	10	8		14	
	M	40	9	5	1	2	3			3	5	6		6	
	F	35	7	3		2	5			3	5	2		8	
108. Diseases of the mouth and annexa	M	1				1									
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	M	2	2												
109B. Pharynx and tonsils	M	2	2												
111. Ulcer of the stomach and duodenum	M	4		2			1					1			
	F	3		2								1			
111A. Ulcer of the stomach	F	2		1								1			
111B. Ulcer of the duodenum	M	4		2			1					1			
	F	1		1											

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
2	2										1	2			1		90D
7	1	3	1			1		1	2	2			1	2	1	2	
18	15		1	2	1	2	6	1	5	1	3	2	7	1	4	3	90E
21	15	2		2	2	2	2	10	4	5	2		5	3	1	4	
11	4		2		1	4	2	2	2	1			1	1	1	2	90F
11	3					1	2	1	1	1		1	2		2	3	
24	14		1	1	8	4	4	4	1	1	5	4		2	3	4	91
33	19	3	1		6	5	1	6	3	7	6	6	3	5	5	3	
1								1									91A
24	14		1	1	8	4	4	4	1	1	5	4		2	3	4	91B
32	19	3	1		6	5	1	5	3	7	6	6	3	5	5	3	
2		1					1				1	1					92
	2									1			1				
		1													1		93
62	28	1	4	1	5	10	9	8	11	9	11	5	6	9	7	6	
28	11		4	1	1	3	4	5	6	3	4	4	3	6	3	2	
34	17	1			4	7	5	3	5	6	7	1	3	3	4	4	
1					1												98
1					1												98C
1												1					99
1										1							
1												1					99A
1										1							
6			1		1	1	1	1			1		2				100
9	10	1			1	3	3	1	2	1	2		3		3	1	
6			1		1	1	1	1			1		2				100A
9	10	1			1	3	3	1	2	1	2		3		3	1	
18	10		3	1		2	2	4	6	2	3	2	1	5	3	2	101
17	6				1	4	1	2	3	3	4			1	1	3	
10	6		2			2	2		2		2	2		4	3	1	101A
10	3					2	1	1	3		4					2	
8	4		1	1				4	4	2	1		1	1		1	101B
7	3				1	2		1		3				1	1	1	
2										1				1			102
2										1	1						
	1						1										103
1	1				1									1			
2							1							1			105
1												1					107
1												1					
1												1					107C
1												1					
65	7	1	2		5	5	7	5	7	2	5	5	4	11	12	7	
35	3	1	1		1	4	5	3	6	1	2	1	2	6	7	2	
30	4		1		4	1	2	2	1	1	3	4	2	5	5	5	
1								1									108
2						1										1	109
2						1										1	109B
4							1		1						2		111
3					1						1					1	
2											1					1	111A
4							1		1						2		111B
1					1												

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
112. Other diseases of the stomach (cancer excepted)	M	3				1					1			1	
	F	3		1							1	1			
113. Diarrhoea and enteritis (under 2 years of age)	M	5		5											
	F	4		4											
114. Diarrhoea and enteritis (2 years or over)	M	6		1			1					2		2	
	F	4					3							1	
117. Appendicitis and typhlitis	M	8		1	3					2	2				
	F	7		1	1		1			2	2				
118. Hernia, intestinal obstruction	M	7				1				1	1	1		3	
	F	2					1							1	
118A. Hernia	M	3				1								2	
	F	1					1								
118B. Intestinal obstruction	M	4								1	1	1		1	
	F	1												1	
119. Other diseases of the intestines	F	3				2					1				
120. Acute yellow atrophy of the liver	F	1	1												
122. Cirrhosis of the liver	M	1					1								
122B. Not specified as alcoholic	M	1					1								
123. Biliary calculi	M	1										1			
	F	1												1	
124. Other diseases of the liver	M	2									1	1			
	F	4									1			3	
126. Peritonitis without specified cause	F	3								1				2	
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.															
Total		120	1	3	2	5	11		1	10	28	23		36	
	M	57	1	2			5		1	2	12	15		19	
	F	63		1	2	5	6			8	16	8		17	
128. Acute nephritis (including unspecified, under 10 years of age)	M	3		1					1					1	
	F	1									1				
129. Chronic nephritis (Bright's disease)	M	42	1	1			2			2	10	11		15	
	F	52				5	5			4	15	7		16	
131. Other diseases of the kidneys and annexa	M	1					1								
	F	1												1	
132. Calculi of the urinary passages	M	1												1	
133. Diseases of the bladder	M	1					1								
135. Diseases of the prostate	M	9					1				2	4		2	
137. Cysts and other benign tumours of the ovary	F	3					1			1		1			
138. Salpingitis and pelvic abscess	F	1		1											
141. Other diseases of the female genital organs	F	5			2					3					
CLASS VIII.—THE PUERPERAL STATE.															
Total		6							3	3					
143. Accidents of pregnancy	F	2							2						
143A. Abortion	F	2							2						
144. Puerperal haemorrhage	F	1								1					
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	F	2							1	1					
149. Following childbirth (not otherwise defined)	F	1								1					

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
2	1							1	1					1			112
3											1		1		1		
5					1	1							1	2			113
4												1		2	1		
6							2				1				3		114
4										1				1	1	1	
7			1				2		2	1				1	2		117
5	2				1			1	1		1			1		2	
5	1	1				2			2		1	1		1			118
2							1						1				
2		1				1			1			1					118A
1													1				
3	1					1			1		1			1			118B
1							1										
3					1							1			1		119
1					1												120
1														1			122
1														1			122B
1													1				123
1						1											
1	1							1								1	124
2	1		1				1							1	1	1	
2	1							1				2					126
75	37	2	2	4	7	14	8	13	13	12	7	5	5	11	10	15	
39	18				4	6	2	8	6	8	3	3	1	6	3	7	
36	19	2	2	4	3	8	6	5	7	4	4	2	4	5	7	8	
1	2				1			1		1							128
1					1												
30	12				2	5	2	5	4	6	1	3	1	4	2	7	129
28	16	2	2	4	2	7	5	5	6	2	3	1	4	4	6	7	
1											1						131
1										1							
1															1		132
1					1												133
5	4					1		2	2	1	1			2			135
2	1											1		1		1	137
1									1								138
3	2					1	1			1	1				1		141
5	1					1			1	1	1		1		1		
2									1						1		143
2									1						1		143A
1													1				144
1	1					1				1							147
1											1						149

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
			Under 15	Single					Married					Widowed	Not stated
				15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.															
Total		8	1			1	1					2		3	
	M	4					1					2		1	
	F	4	1			1								2	
151. Gangrene	M	2										2			
	F	2				1								1	
153. Acute abscess	M	1					1								
	F	1												1	
154. Other diseases of the skin and annexa	M	1												1	
	F	1	1												
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.															
Total		2	1											1	
	F	2	1											1	
155. Diseases of the bones (mastoid and tuberculosis excepted)	F	2	1											1	
CLASS XI.—MALFORMATIONS.															
Total		15	14								1				
	M	9	9												
	F	6	5								1				
159. Congenital malformations (stillbirths not included)	M	9	9												
	F	6	5								1				
159B. Congenital malformations of the heart	M	4	4												
	F	1	1												
159C. Others under this title	M	5	5												
	F	5	4								1				
CLASS XII.—DISEASES OF EARLY INFANCY.															
Total		37	37												
	M	24	24												
	F	13	13												
160. Congenital debility, icterus and sclerema	M	1	1												
161. Premature birth, injury at birth	M	22	22												
	F	11	11												
161A. Premature birth	M	19	19												
	F	10	10												
161B. Injury at birth	M	3	3												
	F	1	1												
162. Other diseases peculiar to early infancy	M	1	1												
	F	2	2												
162A. Specified diseases	M	1	1												
	F	2	2												
CLASS XIII.—OLD AGE.															
Total		8					1							7	
	M	3												3	
	F	5					1							4	
164. Senility	M	3												3	
	F	5					1							4	

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Continued

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
4	3	.....	1	.....	.....	.....	.....	.....	.....	1	1	1	2	1	.....	2	
2	1	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	.....	1	
2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	1	.....	.....	1	
1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	151
1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	153
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	154
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	
2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	155
14	1	.....	.....	.....	1	2	1	.....	1	1	2	1	1	1	3	1	
9	.....	.....	.....	.....	1	.....	.....	.....	1	1	2	.....	1	1	1	1	
5	1	.....	.....	.....	.....	2	1	.....	.....	.....	.....	1	.....	.....	2	.....	
9	.....	.....	.....	.....	1	.....	.....	.....	1	1	2	.....	1	1	1	1	159
5	1	.....	.....	.....	.....	2	1	.....	.....	.....	.....	1	.....	.....	2	.....	
4	.....	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	159B
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	1	1	.....	1	159C
4	1	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	.....	.....	2	.....	
37	.....	.....	.....	.....	2	3	2	.....	6	3	4	3	1	5	2	6	
24	.....	.....	.....	.....	1	3	1	.....	4	3	3	2	.....	3	1	3	
13	.....	.....	.....	.....	1	.....	1	.....	2	.....	1	1	1	2	1	3	
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	160
22	.....	.....	.....	.....	1	3	1	.....	3	3	3	1	.....	3	1	3	161
11	.....	.....	.....	.....	.....	.....	1	.....	2	.....	1	1	1	1	1	3	
19	.....	.....	.....	.....	.....	2	1	.....	3	3	3	1	.....	3	1	2	161A
10	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	1	1	1	1	1	3	
3	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	161B
1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	162
2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	
1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	162A
2	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	
5	2	.....	1	.....	3	.....	1	1	.....	.....	.....	.....	.....	3	.....	.....	
2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	
3	2	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	
2	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	164
3	2	.....	.....	.....	2	.....	1	1	.....	.....	.....	.....	.....	1	.....	.....	

TABLE 42—CAUSES OF DEATH FOR EACH SEX BY CONJUGAL CONDITION,

CAUSES OF DEATH	Sex	Total	CONJUGAL CONDITION												
				Single					Married					Widowed	Not stated
			Under 15	15–24	25–44	45–64	65 and over	Age not stated	15–24	25–44	45–64	65 and over	Age not stated		
CLASS XIV.—EXTERNAL CAUSES.															
Total		60	3	4	4	1	8		1	6	8	11		14	
	M	39	3	4	4	1	5			5	6	9		2	
	F	21					3		1	1	2	2		12	
165-174. Suicides	M	4								2	1			1	
	F	3								1				2	
166. Suicide by corrosive substances	F	1												1	
167. Suicide by poisonous gas	M	1								1					
168. Suicide by hanging or strangulation	M	1												1	
170. Suicide by firearms	M	2								1	1				
171. Suicide by cutting or piercing instruments	F	1												1	
173. Suicide by crushing	F	1								1					
179. Accidental burns and scalds (conflagration excepted)	M	2	1									1			
181. Accidental absorption of irrespirable or poisonous gas	M	1										1			
182. Accidental drowning	M	2	1	1											
185. Accidental traumatism by fall	M	7		1		1	1			2		2			
	F	4					1				1			2	
187. Accidental traumatism by machines	M	2		1										1	
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	M	16	1	1	4		1			1	5	3			
	F	4							1		1			2	
188A. Railroad accidents	M	5		1	2					1		1			
188B. Street car accidents	M	1					1								
188C. Automobile accidents	M	9	1		2						4	2			
	F	4							1		1			2	
188E. Injuries by other vehicles	M	1									1				
201. Fracture (cause not specified)	M	5					3					2			
	F	10					2					2		6	
CLASS XV.—ILL-DEFINED DISEASES.															
Total		3										1		2	
	M	3										1		2	
205. Cause of death not specified or ill-defined	M	3										1		2	
205C. Heart failure	M	3										1		2	

NATIVITY, AND MONTH OF DEATH—LONDON, 1928.—Concluded

NATIVITY					MONTHS												
Canada	British	Foreign		Not stated	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		USA	Other														
33	20	1	4	2	1	1	7	9	3	8	4	7	3	7	6	4	
25	10	.	3	1	1	1	4	4	2	6	2	6	2	6	3	2	
8	10	1	1	1	.	.	3	5	1	2	2	1	1	1	3	2	
3	1	.	.	.	.	.	2	.	.	.	.	.	.	2	.	.	165–
2	1	.	.	.	.	.	.	1	.	.	1	.	.	.	1	.	174
1	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	166
1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	167
.	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.	168
2	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	170
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1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	173
1	1	.	.	.	.	.	.	1	.	1	.	.	.	.	.	.	179
.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	181
2	.	.	.	.	.	.	1	.	.	.	.	.	.	1	.	.	182
7	.	.	.	.	.	.	.	.	1	1	1	3	.	1	.	.	185
3	1	.	.	.	.	.	1	2	.	.	.	1	.	.	.	.	
2	.	.	.	.	.	.	.	.	.	.	.	.	.	2	.	.	187
7	5	.	3	1	.	.	.	3	1	4	1	2	2	.	1	2	188
2	.	1	1	.	.	.	.	1	.	.	1	.	.	.	1	1	
1	3	.	1	.	.	.	.	.	1	1	1	.	.	.	1	1	188A
1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	188B
5	1	.	2	1	.	.	.	2	.	3	.	2	2	.	.	.	188C
2	.	1	1	.	.	.	.	1	.	.	1	.	.	.	1	1	
.	1	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	188E
3	2	.	.	.	1	1	1	.	.	.	.	1	.	.	1	.	201
1	8	.	.	1	.	.	2	1	1	2	.	.	1	1	1	1	
2	1	.	.	.	.	.	.	.	1	.	1	.	.	1	.	.	
2	1	.	.	.	.	.	.	.	1	.	1	.	.	1	.	.	
2	1	.	.	.	.	.	.	.	1	.	1	.	.	1	.	.	205
2	1	.	.	.	.	.	.	.	1	.	1	.	.	1	.	.	205C

TABLE 43—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
Total including cities and towns of 5,000 and over	37,128	80	430	652	532	1,999	523	187	191	309	537	1,470	666	224	187	660	283	66	247	758	592	203
Total excluding cities and towns of 5,000 and over	17,028	80	202	249	532	279	345	187	191	309	323	514	221	224	187	488	283	66	247	446	592	131
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.																						
Total	2,304	7	22	32	61	36	43	17	25	33	24	69	40	39	21	61	26	6	22	54	65	31
1. Typhoid and paratyphoid fever	40	..	..	1	1	1	5	..	..	1	..	1	1	..	1	..	..	..	..	1	1	..
1A. Typhoid fever	38	..	..	1	1	1	5	..	..	1	..	1	1	..	1	..	..	..	..	1	1	..
1B. Paratyphoid fever	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4. Undulant fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5. Malaria	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
6. Small-pox	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7. Measles	30	..	..	2	..	..	..	..	..	2	2	..	..	..	..	..	..	..	1	..	1	4
8. Scarlet fever	36	..	1	1	..	4	3	..	..	1	..	..	..	2	..	2	1	..	..	..	1	..
9. Whooping-cough	73	..	..	1	1	3	2	..	..	2	1	4	..	1	..	2	1	..	4	2	2	1
10. Diphtheria	69	..	..	..	..	1	1	1	1	..	..	2	..	5	1	2	1	1	1	..	1	..
11. Influenza	828	7	5	14	29	11	3	10	14	20	9	22	13	16	8	30	11	3	8	25	43	4
11A. Influenza, sole cause	129	1	1	..	2	..	..	3	5	3	2	1	2	4	1	3	2	..	2	5	7	4
11B. Influenza, with phthisis	8	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11C. Influenza, with bronchitis	34	1	1	1	1	..	..	..	..	1	1	1	..	..	1	1	..	..	..	1	3	..
11D. Influenza, with pneumonia	395	4	2	8	16	6	1	4	5	8	4	15	6	5	3	13	6	3	4	10	20	..
11E. Influenza, with other respiratory diseases	19	..	1	..	2	2	..	..	..	..	..	1	..	1	1	1	..	..	..	..	1	..
11F. Influenza, with diseases and accidents of pregnancy and parturition	8	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	..
11G. Influenza, with other causes	235	1	..	4	7	3	2	3	4	7	2	3	5	6	2	12	3	..	1	9	11	..
12. Miliary fever	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13. Mumps	9	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
16. Dysentery	13	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..
21. Erysipelas	29	..	..	2	1	1	1	..	..	..	..	2	..	..	..	..	1	..	1	..	..	1
22. Acute anterior poliomyelitis	15	..	1	..	1	..	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1
23. Lethargic encephalitis	16	..	..	..	..	..	1	..	1	..	..	1	1	..	..	..	..	..	..	..	1	..
24. Meningococcus meningitis	16	..	..	..	1	1	..	..	..	..	..	1	1	..	..	1	..	..	1	..	..	..
25. Other epidemic and endemic diseases	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25A. Chicken-pox	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25B. German measles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25C. Others under this title	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29. Tetanus	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
30. Mycoses	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31-37. Tuberculosis	1,022	..	14	11	23	14	24	3	8	5	11	27	20	14	9	21	10	1	4	23	12	20
31. Tuberculosis of the respiratory system	894	..	12	8	21	11	22	2	6	5	9	21	18	12	6	17	7	..	4	18	7	20
32. Tuberculosis of the meninges and central nervous system	30	..	..	2	1	1	2	1	..	..	1	1	..	..	..	..	..	..	..	2	1	..
33. Tuberculosis of the intestines and peritoneum	32	..	..	..	..	..	..	..	1	..	1	1	..	..	..	1	2	..	..	1	1	..
34. Tuberculosis of the vertebral column	13	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..
35. Tuberculosis of the joints	8	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..
36. Tuberculosis of other organs	20	..	1	..	..	1	..	..	1	..	..	1	1	1	1	2	1	..	..	..	1	..
36A. Tuberculosis of the skin and subcutaneous cellular tissue	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
36B. Tuberculosis of the bones (vertebral column excepted)	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
36C. Tuberculosis of the lymphatic system (mesenteric, and retroperitoneal glands excepted)	4	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..
36D. Tuberculosis of the genito-urinary system	10	..	1	..	..	..	..	..	1	..	..	1	..	1	..	1	..	..	..	..	..	..
36E. Tuberculosis of organs other than above	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37. Disseminated tuberculosis	25	..	1	1	..	1	..	..	..	..	..	1	1	..	1	1	..	1	..	1	1	..
37A. Disseminated tuberculosis, acute	12	..	..	1	..	1	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..
37B. Disseminated tuberculosis, chronic or unstated	13	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	1	..
38. Syphilis	34	..	..	2	..	..	2	1	..	..	..	3	1	..	1	..	..	..	..	..	..	..
40. Gonococcus infection	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
41. Purulent infection, septicaemia	59	..	1	..	2	..	..	2	..	3	1	2	3	1	..	3	1	1	1	3	2	..

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928.

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
746	608	399	523	129	616	112	1,690	264	346	368	412	676	605	230	269	534	492	314	231	155	586	209	1,054	524	513	527	283	303	860	830	741	1,914	8,269	
440	392	290	352	129	285	112	568	264	217	368	299	318	343	230	189	335	187	237	231	88	325	209	611	252	313	94	283	188	285	403	500	381	1,214	37,128
61	55	29	42	8	32	25	115	77	25	23	26	23	31	27	31	31	18	22	25	19	25	29	66	57	49	24	37	11	38	40	62	96	291	4,738
1	1	..	1	..	1	..	1	..	1	..	1	3	..	1	..	1	..	4	1	2	1	1	1	1	..	..	..	..	..	1	1	...	1	78
1	1	..	1	..	1	..	1	..	1	..	1	3	..	1	..	1	..	3	..	2	1	1	1	1	..	..	..	..	..	1	1	...	1	76
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	...	...	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	...	1
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..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	...	...	2
2	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	1	..	..	..	2	..	..	..	..	...	6	62
1	1	3	..	..	..	..	..	..	..	..	..	1	1	1	1	1	..	..	..	..	1	..	2	4	1	..	1	..	1	..	..	...	1	67
2	3	2	..	1	2	1	..	2	2	..	2	1	1	1	3	2	..	1	1	..	2	..	..	6	..	2	..	..	1	1	...	7	175
1	2	..	..	..	1	..	1	..	2	1	1	1	1	4	..	..	..	1	..	..	..	..	4	10	8	..	3	..	..	2	..	...	8	213
28	33	7	14	4	14	5	28	11	6	14	11	9	14	13	17	21	7	4	10	11	7	11	26	21	10	7	12	6	12	14	42	10	64	1,711
3	7	1	2	..	..	3	2	1	1	1	2	1	2	..	2	3	1	1	1	2	3	..	3	5	5	7	..	2	1	1	11	1	6	211
..	..	1	..	..	..	..	1	1	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	17
2	1	..	1	..	..	..	..	..	..	..	..	..	3	..	1	1	2	..	..	..	..	2	..	2	..	..	..	..	..	..	..	1	1	4	64
15	11	5	3	3	8	2	17	5	2	10	4	4	4	9	7	7	2	3	6	5	3	5	15	6	4	..	11	2	10	8	17	5	34	871
...	...	...	3	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	...	...	1	1	32
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	21
7	14	...	5	1	6	...	8	4	2	2	4	3	5	4	7	9	2	1	2	4	1	3	8	7	1	...	...	2	1	5	12	2	19	495
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
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1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	1	...	1	1	...	...	...	1	31
1	2	...	...	1	1	...	...	...	...	...	...	1	3	1	1	...	...	...	1	...	...	...	...	1	...	2	1	1	1	1	...	...	...	99
...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...	...	1	...	1	2	34
...	2	1	1	1	...	...	1	...	...	...	...	...	1	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	50
2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	3	...	...	...	...	...	...	2	46
1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	11
1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	7
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...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	5
17	8	13	19	..	10	18	79	62	12	6	9	4	8	5	9	2	10	9	12	6	10	12	25	17	15	15	8	3	22	16	15	81	191	1,832
13	6	12	18	..	8	18	73	61	7	6	9	4	4	2	9	2	6	8	12	5	8	8	18	14	9	15	6	2	21	13	11	74	186	1,529
1	...	...	...	...	2	...	1	..	1	...	...	...	1	1	...	...	1	...	...	...	...	...	2	..	2	..	1	..	...	1	1	...	3	83
1	...	1	...	...	...	...	...	...	...	...	...	...	3	1	...	...	1	...	...	1	1	2	3	..	1	...	...	...	...	1	2	3	1	71
...	...	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	...	...	1	1	32
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	1	...	16
2	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	1	1	...	41
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	...	24
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2
...	1	...	1	...	...	...	1	...	2	...	...	...	...	...	...	1	1	...	...	1	1	...	2	1	...	...	...	1	1	...	...	1	...	60
...	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	35
...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	1	...	...	1	1	...	1	1	...	...	...	...	...	...	...	1	...	25
2	...	...	6	...	...	...	2	1	2	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2	1	2	121
...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
2	1	1	...	...	3	...	...	1	...	...	...	2	1	1	...	...	...	1	...	2	...	4	2	4	..	1	...	1	...	...	...	3	3	153

TABLE 43—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.																						
Total	2,131	14	21	36	84	27	19	27	26	32	55	59	23	29	29	92	32	5	24	53	97	7
43-49. Cancer	1,417	8	13	24	53	17	8	22	20	19	44	35	9	18	22	62	22	2	18	39	63	1
43. Cancer of the buccal cavity	54	.	3	2	4	1	.	2	1	1	1	2	.	.	.	3	.	.	.	2	1	.
44. Cancer of the stomach and liver	565	2	4	9	14	7	6	8	3	8	22	14	3	10	8	26	5	1	6	16	27	1
45. Cancer of the peritoneum, intestines and rectum	219	4	.	3	11	5	.	6	.	1	4	6	3	2	4	9	6	.	4	4	11	.
46. Cancer of the female genital organs	113	1	2	1	5	.	.	2	4	2	2	3	1	2	2	5	.	.	1	4	3	.
47. Cancer of the breast	143	.	1	2	5	2	.	1	3	3	4	1	.	1	2	6	2	.	.	4	7	.
48. Cancer of the skin	38	.	1	.	2	.	.	1	2	.	4	2	1	.	1	1	.	.	2	1	3	.
49. Cancer of other or unspecified organs	285	1	2	7	12	2	2	2	7	4	7	7	1	3	5	12	9	1	5	8	11	.
49A. Cancer of eye and ear	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
49B. Cancer of circulation system	27	.	2	1	3	.	2	.	.	.	1	.	.	.	.	.	1	.	.	1	1	.
49C. Cancer of respiratory system	39	.	.	1	1	1	.	1	.	2	.	1	.	.	.	.	.	1	2	.	.	.
49D. Cancer of digestive system	45	.	.	2	.	.	.	.	3	1	1	2	.	.	.	2	1	.	.	1	1	.
49E. Cancer of genito-urinary organs	106	1	.	2	5	1	.	1	2	1	2	3	1	1	4	6	5	.	2	4	5	.
49F. Cancer of bones and joints	20	.	.	1	.	.	.	.	.	.	1	.	.	1	1	3	.	.	.	1	3	.
49G. Cancer of other specified organs	31	.	.	.	2	.	.	.	1	.	1	1	.	1	.	1	1	.	1	1	1	.
49H. Generalized cancer	6	.	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
49I. Unspecified	7	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	1	.	.	.	.	.
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted.)	16	.	.	2	.	.	2	.	.	.	.	.	.	.	.	1	.	.	1	.	2	.
51. Acute rheumatic fever	48	.	.	.	1	1	.	.	.	2	1	4	.	.	.	1	.	.	.	.	2	3
52. Chronic rheumatism, osteo-arthritis, gout	23	.	1	.	.	1	.	.	.	1	1	1	.	.	.	1	.	.	.	1	1	.
53. Scurvy	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
54. Pellagra	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
56. Rickets	27	.	3	.	.	2	1	.	.	.	.	2	.	2	.	.	.	.	.	.	.	1
57. Diabetes mellitus	177	.	.	3	11	3	4	2	2	4	2	10	3	1	2	5	5	.	.	3	7	.
58. Anaemia, chlorosis	197	1	1	3	10	1	.	2	2	4	5	1	6	6	2	7	2	1	4	4	10	1
58A. Pernicious anaemia	181	1	1	3	10	1	.	2	2	3	5	1	6	6	2	7	2	1	3	4	9	1
58B. Other anaemias and chlorosis	16	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	1	.
59. Diseases of the pituitary gland	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
60. Diseases of the thyroid gland	117	4	1	1	5	1	2	.	1	2	1	4	1	1	1	12	1	1	.	4	7	.
60A. Exophthalmic goiter	73	4	1	.	3	1	.	.	1	1	1	2	.	1	1	6	1	1	.	3	5	.
60B. Other diseases of the thyroid gland	44	.	.	1	2	.	2	.	.	1	.	2	1	.	.	6	.	.	.	1	2	.
61. Diseases of the parathyroid glands	6	.	.	.	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
62. Diseases of the thymus	21	.	.	1	.	.	2	.	.	.	.	1	2	.	.	.	.	.	.	2	1	.
63. Diseases of the adrenals (Addison's disease	3	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
64. Diseases of the spleen	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
65. Leukaemia, lymphadenoma	32	1	.	1	1	.	.	.	1	.	1	.	.	.	.	2	1	.	.	.	3	.
65A. Leukaemia	22	.	.	.	1	.	.	.	1	.	1	.	.	.	.	1	1	.	.	.	3	.
65B. Lymphadenoma (Hodgkin's disease)	10	1	.	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.
66. Alcoholism	14	.	1	.	.	.	.	.	.	.	.	.	.	.	2	.	.	.	1	1	.	.
66A. Delirium tremens	2	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.
66B. Acute alcoholism	10	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	1	.	.
66C. Chronic alcoholism	2	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
67. Chronic poisoning by mineral substances	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
67A. Chronic lead poisoning	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
67B. Others under this title	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
68. Chronic organic poisoning	4	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
68A. Chronic morphinism	2	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
68C. Other organic poisoning	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
69. Other general diseases	23	.	1	.	1	.	.	1	.	.	.	1	1	1	.	.	1	.	.	.	1	.
69A. Diabetes insipidus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
69B. Haemophilia	11	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.
69C. Purpura haemorrhagica	5	.	1	.	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.
69D. Others under this title	6	.	.	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.	1	.
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																						
Total	1,368	5	8	25	41	18	14	12	16	24	34	46	19	14	22	38	16	4	27	38	68	6
70. Encephalitis	26	1	.	.	1	.	.	.	.	.	1	2	.	.	.	2	.	.	.	.	3	.
70A. Abscess of brain	5	.	.	.	.	.	.	.	.	.	.	1	.	.	.	1	.	.	.	.	.	.
70B. Encephalitis	21	1	.	.	1	.	.	.	.	.	1	1	.	.	.	1	.	.	.	.	3	.
71. Meningitis	51	.	.	1	1	2	2	.	.	.	3	2	.	.	1	.	.	.	3	2	1	1
71A. Simple meningitis	49	.	.	1	1	2	2	.	.	.	3	2	.	.	1	.	.	.	3	2	1	1
71B. Non-epidemic, cerebrospinal meningitis	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928.—Continued

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
54	54	29	42	24	41	11	74	22	20	49	33	40	47	22	30	55	28	31	31	9	37	21	79	27	23	8	32	27	35	39	92	35	139	5,094
32	36	23	27	20	26	8	56	16	10	35	22	23	34	18	20	33	15	22	21	6	24	15	49	21	12	4	21	21	21	27	63	28	89	3,441
1	..	..	1	..	..	1	3	1	..	1	2	2	1	..	..	1	2	1	..	..	1	1	1	..	..	..	..	1	2	2	4	1	1	132
14	17	8	10	7	10	2	30	6	6	18	9	10	13	8	3	14	5	10	9	2	12	4	25	10	4	1	8	11	9	6	20	12	32	1,205
2	4	5	4	4	6	1	8	1	..	3	1	4	4	3	7	4	5	8	2	1	4	1	1	3	3	1	2	4	1	5	14	3	17	605
6	4	1	1	3	3	1	..	1	..	2	4	1	5	..	..	1	..	..	3	1	2	..	2	2	3	..	1	..	1	7	3	3	12	337
1	4	4	1	1	4	2	2	3	4	3	2	2	4	1	5	4	1	..	3	2	1	4	7	4	1	..	..	1	5	2	3	6	12	344
..	1	..	2	..	..	..	2	..	..	..	..	..	1	1	1	1	..	..	1	..	1	1	1	1	..	..	1	..	..	..	1	..	1	72
8	6	5	8	5	3	1	11	4	..	8	4	4	6	5	4	8	2	3	3	..	3	4	12	1	1	2	9	4	3	5	18	3	14	746
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	10
..	1	..	..	..	..	..	3	..	..	1	..	1	..	2	1	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	1	3	1	..	72
2	..	1	1	..	1	..	3	1	..	1	..	..	1	1	..	..	1	2	..	..	..	..	2	..	..	..	3	..	..	..	4	1	4	116
2	1	2	1	2	1	..	1	..	..	1	..	..	..	..	..	1	1	..	1	..	..	..	1	..	..	1	1	..	3	1	5	..	5	117
1	2	2	3	..	..	1	3	3	..	5	3	2	3	1	2	3	..	1	1	..	1	2	6	1	..	..	3	3	..	1	2	1	4	283
1	..	..	..	1	1	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	44
2	2	..	1	..	..	..	1	..	..	1	1	1	1	1	..	1	..	..	..	..	1	2	1	..	..	..	1	1	..	1	1	..	..	76
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	15
..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	13
..	..	..	1	..	..	..	2	..	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	1	46
1	..	..	3	1	1	1	1	..	..	..	..	1	1	..	..	1	1	1	..	1	2	1	1	..	2	2	1	..	1	3	..	1	5	123
..	..	..	..	..	1	1	..	..	..	2	..	1	..	..	..	1	..	2	1	..	1	..	2	..	..	1	..	..	..	..	..	..	2	35
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2	..	1	..	..	1	..	..	..	2	2	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	2	1	..	..	..	51
7	4	..	4	..	5	..	5	4	1	7	6	7	2	..	2	7	3	3	1	1	4	3	7	2	2	1	1	..	4	..	10	..	7	439
6	9	1	4	1	3	1	7	2	4	2	3	4	4	..	4	6	3	1	5	1	2	1	12	1	..	..	4	5	5	1	7	3	12	341
6	9	1	3	1	2	..	7	1	1	2	3	3	4	..	4	6	3	..	5	1	2	1	11	1	..	..	3	5	4	1	7	3	11	307
..	..	..	1	..	1	1	..	1	3	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	1	..	..	..	1	34
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
5	4	3	2	1	4	..	3	..	3	..	1	3	2	2	3	3	5	..	..	..	1	1	2	2	1	..	1	..	1	..	3	3	8	280
3	4	3	1	1	3	..	2	..	3	..	..	..	1	..	2	2	3	..	..	..	..	..	1	1	1	..	1	..	..	..	2	3	4	171
2	..	..	1	..	1	..	1	..	..	..	1	3	1	2	1	1	2	..	..	..	1	1	1	1	..	..	..	..	1	..	1	..	4	109
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	13
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	4	..	..	5	61
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..	..	1	..	1	..	..	2	..	..	..	..	..	1	1	..	..	1	1	..	..	2	..	2	..	..	..	..	..	..	1	2	..	1	58
..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	2	35
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..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	4
..	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	2	..	..	..	2	..	..	..	1	..	..	..	3	..	2	52
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	2	..	..	..	1	..	..	..	..	..	..	..	2	..	1	20
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	14
..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	16
29	37	19	33	12	28	9	52	11	17	23	31	24	26	15	18	32	18	14	16	2	33	14	63	14	16	5	19	19	25	20	38	57	84	2,844
3	..	1	..	..	..	..	1	1	..	..	..	..	2	2	..	2	..	1	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	66
1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
2	..	1	..	..	..	..	1	1	..	..	..	..	2	1	..	1	..	1	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	50
..	..	..	1	1	..	1	2	1	4	1	2	..	..	..	..	1	1	..	..	..	1	1	..	2	3	..	1	1	1	..	..	3	4	115
..	..	..	1	1	..	1	2	1	4	1	1	..	..	..	..	1	..	..	..	..	1	1	..	2	3	..	1	1	1	..	..	3	4	113
..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

TABLE 43—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
72. Tabes dorsalis (locomotor ataxia)	7	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	1
73. Other diseases of the spinal cord	80	..	2	2	2	1	1	2	..	2	2	..	1	1	..	4	3	1	1	1	5	..
74. Cerebral haemorrhage, apoplexy	723	4	5	15	25	10	4	4	13	9	17	19	10	10	15	20	9	3	12	23	46	2
74A. Apoplexy	393	3	3	9	18	7	3	4	9	7	7	10	7	5	9	8	4	1	6	12	25	1
74B. Cerebral haemorrhage	297	1	2	6	7	3	1	..	4	2	10	8	2	5	4	10	5	2	6	11	20	1
74C. Cerebral thrombosis and embolism	33	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2	..	..	..	..	1	..
75. Paralysis without specified cause	129	..	1	..	3	1	3	3	1	7	4	7	..	1	..	4	2	..	4	1	3	1
75A. Hemiplegia	69	..	1	..	3	..	1	1	1	2	1	5	..	1	..	1	1	..	2	1	2	..
75B. Others under this title	60	..	..	..	..	1	2	2	..	5	3	2	..	..	..	3	1	..	2	..	1	1
76. General paralysis of the insane	24	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	1	2	..
77. Other forms of mental alienation	29	..	..	..	1	..	..	..	..	..	1	1	1	..	..	1	..	..	1	1	..	..
79. Epilepsy	95	..	..	2	4	1	..	1	..	1	1	2	7	1	1	1	2	..	2	2	1	..
79. Convulsions (non-puerperal, 5 years or over.)	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
80. Infantile convulsions (under 5 years of age)	65	..	..	1	2	1	4	..	..	1	..	3	..	1	1	2	1	..	2	2	..	1
81. Chorea	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
82. Neuralgia and neuritis	6	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
83. Softening of the brain	17	..	..	1	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	1	..
84. Other diseases of the nervous system	89	..	..	..	1	1	..	1	1	4	3	4	..	1	..	4	1	..	1	4	5	..
85. Diseases of the eye and annexa	4	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..
86. Diseases of the ear and of the mastoid process	17	..	..	1	1	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..
86A. Diseases of the ear	13	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
86B. Diseases of the mastoid process	4	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.																						
Total	4,451	25	41	84	164	92	23	68	55	97	102	102	60	54	65	129	92	8	66	132	145	28
87-90. Diseases of the heart	2,808	13	35	49	103	47	19	31	34	62	70	66	27	37	35	77	52	6	45	77	99	15
87. Pericarditis	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..
88. Endocarditis and myocarditis (acute)	73	..	1	1	2	2	..	..	..	..	2	1	..	..	2	3	1	2	3	..	1	..
88A. Acute endocarditis	27	..	1	..	2	..	..	..	..	..	1	..	..	..	..	2	..	1	..	..	..	..
88B. Acute myocarditis	46	..	..	1	..	2	..	..	..	..	1	1	..	..	2	1	1	1	3	..	1	..
89. Angina pectoris	374	2	3	6	9	7	1	11	3	9	21	13	4	5	4	4	1	..	5	13	16	3
90. Other diseases of the heart	2,357	11	31	42	92	38	18	20	31	52	47	52	23	32	29	69	50	4	37	64	82	12
90A. Valvular disease	484	4	4	9	17	1	4	4	4	18	11	8	7	12	8	19	8	1	4	15	16	3
90B. Fatty degeneration of the heart	18	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	..	..	..	1	1	..
90C. Aortic insufficiency	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
90D. Chronic endocarditis	333	1	3	3	14	5	5	3	2	12	2	10	3	5	3	2	2	..	6	12	9	1
90E. Chronic myocarditis	1,119	6	20	24	46	24	3	9	16	10	26	26	8	10	12	36	34	2	18	29	33	6
90F. Others under this title	401	..	4	6	15	8	6	4	9	9	7	8	5	5	6	12	6	1	9	7	23	2
91. Diseases of the arteries	1,567	12	4	34	59	44	4	36	21	35	31	34	29	15	30	51	39	2	19	54	40	11
91A. Aneurysm	19	..	..	..	2	..	1	..	..	1	2	1	..	1	..	..	..	..	..	..	1	..
91B. Arteriosclerosis	1,542	12	4	34	57	44	3	36	21	34	29	33	28	14	30	51	39	2	19	54	39	11
91C. Other diseases of the arteries	6	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
92. Embolism and thrombosis (not cerebral)	50	..	1	1	2	..	..	..	..	..	..	2	4	..	..	1	1	..	1	1	5	1
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	14	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	1	..
94. Diseases of the lymphatic system lymphangitis, etc.)	6	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
95. Haemorrhage without specified cause	4	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
96. Other diseases of the circulatory system	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.																						
Total	1,429	5	19	15	39	20	40	17	12	32	24	60	16	23	16	41	29	10	23	35	38	7
97. Diseases of the nasal fossae and their annexa	5	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
98. Diseases of the larynx	13	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..
98A. Laryngismus stridulus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98B. Laryngitis	7	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
98C. Croup	4	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
98D. Other diseases of the larynx	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
99. Bronchitis	87	..	1	1	4	3	1	..	3	2	2	1	1	1	1	3	3	..	..	3	4	..
99A. Bronchitis, acute	39	..	1	1	1	1	1	..	1	1	1	1	..	..	..	3	2	..	..	1	1	..
99B. Bronchitis, chronic	31	..	..	..	3	1	..	..	..	1	1	..	1	1	1	..	..	..	..	2	2	..
99C. Bronchitis, not otherwise defined, under 5 years of age	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928.—Continued

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	29
1	4	...	2	2	1	..	2	...	...	2	1	1	2	..	1	1	2	..	3	..	3	..	6	1	...	...	...	3	...	1	4	6	196
16	26	11	12	8	20	1	32	6	4	13	22	18	11	6	11	21	5	7	9	..	21	5	20	4	8	2	6	7	14	15	27	16	44	1,395
12	18	4	8	6	15	1	13	4	2	3	9	8	7	2	4	2	10	1	5	3	..	13	3	7	1	6	2	2	4	10	6	12	9	17	647
2	7	7	3	2	3	..	16	2	2	9	13	10	4	4	2	10	1	5	3	..	7	1	10	3	2	..	3	2	3	9	14	7	21	655
2	1	..	1	..	2	..	3	..	..	1	..	..	..	..	..	..	..	..	1	..	1	1	3	..	..	..	1	1	1	..	1	..	6	93
3	...	3	1	1	4	3	4	3	2	2	2	1	2	1	2	4	3	4	..	..	4	2	5	..	2	1	1	8	3	..	1	2	9	240
2	...	3	1	1	3	1	1	1	..	1	..	..	1	..	1	2	3	2	..	..	2	2	2	..	..	1	..	6	1	..	..	2	7	151
1	..	.	...	..	1	2	3	2	2	1	2	1	1	..	1	2	..	2	..	..	2	..	3	..	2	..	1	2	2	..	1	..	2	89
...	...	...	3	..	..	..	2	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	...	..	..	..	..	..	..	1	...	9	2	56
...	...	1	4	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	11	1	82
1	2	...	9	..	..	..	4	..	1	2	..	2	5	2	..	2	2	..	2	..	..	..	10	3	1	1	2	1	1	1	3	4	5	163
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
2	1	1	...	..	1	1	1	..	3	...	...	...	2	2	1	..	2	..	1	1	2	4	5	1	1	..	4	..	..	1	2	1	3	104
...	...	1	...	..	..	..	..	..	1	...	...	...	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	11
...	...	...	...	..	..	1	..	..	..	...	...	...	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	15
1	1	1	...	..	..	..	1	2	..	2	...	1	...	..	..	..	..	..	1	..	..	..	...	..	..	..	..	1	..	..	..	..	1	32
2	3	...	1	..	..	2	2	..	..	1	3	1	2	2	1	1	..	2	..	1	..	..	12	2	..	..	3	..	3	1	1	5	7	213
...	...	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	...	..	..	..	..	1	..	..	..	..	..	11
...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	2	1	1	1	1	1	..	..	..	1	1	1	113
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	1	1	1	1	1	..	..	..	1	1	1	65
...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48
110	110	101	114	42	85	21	156	66	32	123	90	95	116	53	42	117	57	38	86	9	76	47	165	49	35	17	52	45	80	99	123	84	284	8,880
81	70	50	60	21	55	19	92	41	24	63	71	59	80	37	27	75	33	23	69	8	56	32	115	31	21	12	34	27	44	67	84	57	171	5,609
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	1	...	...	...	...	...	...	...	...	1	...	...	...	13
1	...	1	3	1	..	1	3	2	..	1	1	1	1	3	1	1	..	..	3	..	..	5	3	..	1	1	1	..	4	2	1	1	9	179
..	...	...	1	1	..	..	1	..	..	..	1	..	..	1	1	..	..	..	1	..	..	1	2	..	..	1	1	..	2	1	...	1	4	89
1	...	1	2	...	..	1	2	2	..	1	..	1	1	2	..	1	..	..	2	..	..	4	1	..	1	..	..	2	1	1	..	..	5	90
12	10	5	7	2	5	1	14	4	1	13	16	9	14	1	2	8	1	3	14	1	4	3	8	6	3	1	5	5	5	4	11	6	30	735
68	60	44	50	18	50	17	75	35	23	49	54	49	65	33	24	66	32	20	52	7	51	24	104	25	17	10	28	22	35	60	72	50	132	4,682
13	14	8	5	7	5	9	11	7	3	9	12	8	15	6	6	10	14	2	13	3	16	2	24	3	2	2	2	4	3	19	17	11	22	890
1	...	1	5	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	26
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	3
10	7	4	7	4	6	1	7	7	...	15	3	11	6	6	5	7	5	6	7	..	7	7	16	5	6	2	9	6	7	5	7	7	22	662
25	31	28	22	1	35	5	49	17	14	21	29	19	34	18	8	38	8	7	26	1	17	11	46	11	6	4	12	10	17	28	34	29	60	2,399
19	8	3	11	6	4	2	8	4	6	4	10	11	9	3	5	10	5	4	6	3	11	4	15	6	3	2	5	2	8	8	14	2	28	702
27	35	51	52	21	26	2	61	25	8	58	18	35	34	16	15	41	24	15	16	1	19	14	46	17	14	5	18	17	36	31	37	23	105	3,111
1	...	1	...	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	1	...	3	56
26	33	50	52	20	26	2	59	24	8	58	18	35	34	16	15	41	24	15	16	1	19	13	46	17	14	4	18	17	36	31	36	23	101	3,033
...	2	...	...	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	...	1	22
1	5	...	1	..	2	..	2	..	..	1	..	1	1	..	..	1	..	..	..	..	..	..	3	1	..	..	..	1	..	1	1	2	6	99
...	...	...	...	..	1	..	1	..	..	1	1	...	1	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	1	1	...	39
1	...	...	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	2	12
...	...	...	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
...	...	...	...	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	4
37	20	25	32	14	21	5	39	23	18	25	27	32	24	22	15	12	16	27	14	7	25	21	42	13	42	13	26	14	31	49	40	33	106	3,330
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	..	..	..	..	..	..	...	...	1	20
1	...	...	...	...	...	...	1	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	1	..	1	..	..	..	..	1	...	...	2	29
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	..	..	..	..	..	...	...	...	1
...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	..	..	..	..	..	..	1	...	...	1	19
...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	..	..	..	..	..	...	...	1	7
1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	..	..	..	..	..	...	...	...	2
2	1	...	1	1	1	3	5	..	2	...	3	2	...	1	2	2	1	1	3	2	2	..	3	1	3	..	..	..	3	..	...	1	7	149
2	...	...	1	...	1	2	2	..	2	...	...	...	...	1	1	...	1	2	2	..	...	...	1	..	2	..	..	..	1	..	...	...	2	67
...	1	...	...	1	...	...	3	..	...	...	2	2	...	...	1	1	...	1	...	..	...	...	...	..	...	..	..	..	2	..	...	1	3	55
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	..	...	..	..	..	...	..	...	...	...	4

TABLE 43—CAUSES OF DEATH FOR COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
99D. Bronchitis, not otherwise defined, 5 years or over	15	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	1	..	..	..	1	..
100. Broncho-pneumonia (including capillary bronchitis)	395	2	4	7	8	6	14	5	1	9	2	13	2	3	4	11	6	3	9	12	9	3
100A. Broncho-pneumonia	388	2	4	7	7	6	14	5	1	8	2	13	2	3	4	11	6	3	9	12	9	3
100B. Capillary bronchitis	7	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
101. Pneumonia	765	1	14	5	22	10	23	11	7	15	18	40	6	15	7	20	15	7	12	17	16	3
101A. Pneumonia, lobar	333	1	7	4	7	6	7	5	2	10	5	14	4	4	2	9	6	6	6	12	9	1
101B. Pneumonia, not otherwise defined	432	..	7	1	15	4	16	6	5	5	13	26	2	11	5	11	9	1	6	5	7	2
102. Pleurisy	45	..	..	1	1	..	1	..	1	2	..	1	1	1	1	2	2	..	..	..	3	..
103. Congestion and haemorrhagic infarct of the lung	59	2	..	..	2	1	..	..	..	1	..	2	6	..	1	2	1	..	1	2	4	..
104. Gangrene of the lung	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
105. Asthma	33	..	..	1	..	..	..	..	..	2	2	1	..	..	2	1	1	..	..	1	1	..
106. Pulmonary emphysema	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
107. Other diseases of the respiratory system (tuberculosis excepted)	25	..	..	..	..	..	1	..	..	1	..	2	..	1	..	1	..	..	1	..	1	1
107A. Chronic interstitial pneumonia including occupational diseases of the lungs	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
107B. Diseases of the mediastinum	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
107C. Others under this title	23	..	..	..	..	..	1	..	..	1	..	2	..	..	..	1	..	..	1	..	1	1
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.																						
Total	890	3	25	8	27	13	48	7	7	12	9	24	8	11	7	22	10	4	7	16	29	8
108. Diseases of the mouth and annexa	26	..	..	..	3	..	..	..	1	2	2	1	..	..	..	..	1	..	..	..	..	..
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	36	..	1	..	2	..	..	..	1	1	..	..	..	..	..	1	1	..	..	1	1	..
109A. Adenoid vegetations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
109B. Pharynx and tonsils	36	..	1	..	2	..	..	..	1	1	..	..	..	..	..	1	1	..	..	1	1	..
110. Diseases of the oesophagus	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
111. Ulcer of the stomach and duodenum	52	..	3	..	3	..	..	2	1	3	1	..	..	1	..	1	..	..	2	..	1	..
111A. Ulcer of the stomach	31	..	2	..	1	..	..	1	..	1	..	..	..	..	..	1	..	..	..	..	1	..
111B. Ulcer of the duodenum	21	..	1	..	2	..	..	1	1	2	1	..	..	1	..	..	..	..	2	..	..	..
112. Other diseases of the stomach (cancer excepted)	123	..	7	..	4	5	3	..	1	2	..	3	..	4	2	4	2	1	..	4	4	..
113. Diarrhoea and enteritis (under 2 years of age)	209	..	3	1	2	2	31	2	2	..	2	9	1	5	1	3	..	..	3	1	2	3
114. Diarrhoea and enteritis (2 years or over)	68	..	3	1	1	..	..	..	..	..	1	3	1	1	3	1	..	..	2	3	..	..
116. Diseases due to other intestinal parasites	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
116C. Nematodes (other than ankylostoma	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
117. Appendicitis and typhlitis	103	1	3	2	1	..	4	2	1	..	1	1	1	..	..	1	2	2	..	2	5	4
118. Hernia, intestinal obstruction	98	..	2	1	6	3	6	..	..	2	..	2	1	..	1	5	2	..	..	..	5	..
118A. Hernia	30	..	1	1	1	1	2	..	..	1	..	1	..	..	..	1	..	..	..	..	2	..
118B. Intestinal obstruction	68	..	1	..	5	2	4	..	..	1	..	1	1	..	1	4	2	..	..	..	3	..
119. Other diseases of the intestines	19	..	..	..	..	1	..	..	..	1	1	..	1	..	..	3	..	1	..	..	1	1
120. Acute yellow atrophy of the liver	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
122. Cirrhosis of the liver	40	..	2	..	..	1	1	..	..	1	..	1	1	..	..	..	..	..	..	1	2	..
122A. Specified as alcoholic	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
122B. Not specified as alcoholic	39	..	2	..	..	1	1	..	..	1	..	..	1	..	..	..	..	..	..	1	2	..
123. Biliary calculi	19	..	..	1	2	..	..	1	..	..	1	1	..	..	..	..	..	..	..	1	..	..
124. Other diseases of the liver	58	1	1	..	2	1	1	..	..	..	..	3	1	..	..	2	1	..	..	2	5	..
125. Diseases of the pancreas	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
126. Peritonitis without specified cause	26	1	..	2	1	..	2	..	..	..	..	..	1	..	..	..	1	..	..	..	3	..
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																						
Total	1,174	7	12	17	45	15	8	10	11	15	22	33	21	21	8	31	23	10	28	32	61	6
128. Acute nephritis (including unspecified, under 10 years of age)	55	..	..	1	3	4	2	1	..	1	..	1	1	3	..	1	1	..	2	1	1	..
129. Chronic nephritis (Bright's disease)	856	4	10	13	27	6	4	5	10	9	21	23	17	17	7	18	16	8	24	22	39	5
131. Other diseases of the kidneys and annexa	59	..	2	..	2	1	1	1	..	..	1	3	1	1	..	1	1	..	1	..	4	1
132. Calculi of the urinary passages	8	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
133. Diseases of the bladder	32	..	..	1	..	1	..	..	..	1	..	..	1	..	..	3	1	..	..	1	2	..
134. Diseases of the urethra, urinary abscess, etc	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928.—Continued

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
...	..	...	...	...	...	1	...	..	..	...	1	...	...	..	..	1	..	1	..	..	..	..	2	1	1	..	..	..	..	..	...	...	2	23
10	4	7	12	4	12	1	4	8	10	5	2	6	7	6	2	...	3	13	1	1	1	10	11	4	13	4	8	2	9	21	9	15	37	1,002
10	4	7	12	4	12	1	4	8	10	5	2	6	7	6	2	...	3	10	1	1	1	10	11	4	13	4	8	2	9	21	8	15	36	989
...	..	...	...	...	...	...	...	..	..	...	..	...	...	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	13
22	14	15	10	7	8	1	23	12	4	16	22	19	14	13	10	9	12	8	9	4	18	10	20	5	18	9	14	7	18	21	26	15	48	1,734
9	9	6	6	2	7	..	10	7	3	5	14	6	3	3	7	1	5	3	5	2	1	8	10	3	2	..	10	..	9	13	3	11	23	903
13	5	9	4	5	1	1	13	5	1	11	8	13	11	10	3	8	7	5	4	2	17	2	10	2	16	9	4	7	9	8	23	4	25	831
...	1	..	3	..	..	..	1	2	1	...	..	2	1	..	1	1	..	1	1	..	..	1	1	1	2	..	3	..	..	1	2	...	2	132
1	...	2	6	1	..	..	2	..	1	...	..	3	...	1	..	..	..	1	..	..	2	..	4	2	2	..	..	1	..	2	...	...	3	110
...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
...	..	..	...	1	..	..	..	..	..	1	..	...	1	1	..	..	..	2	..	..	1	..	...	..	3	..	1	3	1	2	1	...	3	74
...	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
1	...	1	...	..	..	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	2	2	3	72
...	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	...	1	...	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	2	2	3	67
18	14	6	12	5	8	17	14	6	25	20	13	20	14	24	10	10	13	26	5	9	19	18	37	19	29	1	27	13	13	19	41	12	48	2,660
...	...	...	...	...	...	...	...	1	..	2	..	...	1	1	..	1	..	..	..	..	2	..	1	..	..	..	1	1	..	1	1	1	2	53
...	...	1	1	..	1	..	...	1	..	...	..	...	2	1	1	...	..	2	1	1	..	..	...	1	..	..	3	1	..	2	2	2	4	125
...	...	...	...	...	...	...	...	...	...	...	..	...	...	..	..	..	..	..	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	2
...	...	1	1	..	1	..	...	1	..	...	..	...	2	1	1	...	..	2	1	1	..	..	...	1	..	..	3	1	..	2	2	2	4	125
...	...	...	...	...	...	...	...	...	...	1	..	...	...	..	..	..	..	..	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	4
...	...	1	1	2	1	..	...	1	1	...	2	1	...	2	..	3	2	..	1	1	1	..	4	..	2	..	1	..	..	..	3	1	3	201
...	...	...	...	2	..	..	...	1	1	...	2	1	...	2	..	3	2	..	1	1	1	..	3	..	1	..	1	..	..	..	1	...	1	110
...	...	1	1	..	1	..	...	..	..	...	..	...	...	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	2	1	2	91
1	1	1	3	1	1	14	...	..	1	2	2	3	...	2	1	1	3	3	..	1	6	4	3	2	...	..	5	2	1	2	1	2	8	200
7	3	...	1	..	2	1	1	2	13	2	3	1	...	5	3	...	2	11	1	1	3	13	7	14	12	..	3	2	3	7	1	...	12	643
6	1	...	...	1	..	..	...	..	4	1	..	2	1	3	2	2	..	5	..	1	2	1	4	..	4	..	3	..	..	1	2	1	1	159
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	4	2	...	..	1	1	3	1	3	...	2	5	4	2	...	...	3	1	1	1	...	..	2	1	3	..	7	3	4	..	13	...	3	433
...	2	...	2	..	..	1	5	..	1	4	1	4	2	3	..	1	1	..	..	3	4	..	6	..	1	..	2	3	2	3	7	1	3	313
...	1	...	...	..	..	..	2	..	1	...	1	2	2	..	..	1	..	..	..	1	2	..	2	..	...	..	1	1	..	..	1	1	..	108
...	1	...	2	..	..	1	3	..	..	4	..	2	..	3	..	..	1	..	..	2	2	..	4	..	1	..	1	2	2	3	6	..	3	205
...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	1	..	..	..	..	..	..	2	..	1	1	..	..	..	..	1	..	..	66
...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	1	...	..	...	..	1	..	..	1	..	1	...	...	1	15
1	...	...	1	1	...	..	2	..	..	2	2	...	...	..	1	...	2	1	..	..	..	..	2	..	3	..	1	..	1	..	2	3	5	104
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
1	...	...	1	1	...	..	2	..	..	2	2	...	...	..	1	...	2	1	..	..	..	..	2	..	3	..	1	..	1	..	2	3	5	100
1	...	...	1	..	1	..	...	..	..	1	..	...	1	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	4	...	..	68
1	2	1	1	..	..	..	3	..	..	4	..	3	1	1	1	1	..	2	1	..	..	..	5	..	2	..	1	..	1	1	2	...	4	181
...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	27
1	1	...	1	..	1	..	...	..	2	...	1	...	...	2	..	...	..	1	..	..	..	..	...	..	..	..	..	..	1	..	2	1	1	65
43	31	18	19	12	18	9	44	11	7	34	24	28	28	18	9	32	14	13	30	3	16	18	51	15	12	2	7	12	28	30	21	21	60	2,624
3	1	...	...	..	..	..	3	1	2	2	..	2	2	..	..	...	1	..	..	1	..	1	2	2	..	1	..	..	1	3	...	2	2	146
32	23	14	15	9	14	2	37	8	3	27	18	21	24	15	8	25	10	11	23	2	11	14	35	12	11	1	6	8	17	25	14	13	43	1,743
2	2	...	1	1	1	..	2	..	..	2	1	1	...	1	..	1	..	1	1	..	..	1	5	..	1	..	..	2	2	..	2	2	6	154
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	..	2	..	..	..	...	..	..	..	..	..	..	..	..	..	3	31
...	1	...	...	1	1	2	...	..	..	...	1	1	...	..	..	..	..	..	1	..	1	1	4	..	..	..	..	1	2	..	2	1	1	67
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11

TABLE 43—CAUSES OF DEATH FOR COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
134A. Stricture of the urethra	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
134B. Other diseases of the urethra	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
135. Diseases of the prostate	134	1	..	1	6	3	1	3	1	4	..	4	1	..	..	8	3	2	1	6	13	..
136. Non-venereal diseases of the male genital organs	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
137. Cysts and other benign tumours of the ovary	5	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
138. Salpingitis and pelvic abscess	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
139. Benign tumours of the uterus	11	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..
140. Non-puerperal uterine haemorrhage	3	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
141. Other diseases of the female genital organs	6	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..
142. Non-puerperal diseases of the breast (cancer excepted)	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
CLASS VIII.—THE PUERPERAL STATE.																						
Total	107	1	2	1	5	1	9	1	2	3	..	1	1	..	1	1	..	..	1	2	..	5
143. Accidents of pregnancy	10	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
143A. Abortion	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
143B. Ectopic gestation	4	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
143C. Others under this title	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
143D. Abortion, self-induced	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
144. Puerperal haemorrhage	13	..	..	..	1	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
145. Other accidents of labour	8	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
145A. Caesarean section	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
145B. Difficult labour	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
145C. Other surgical operations and instrumental delivery	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
145D. Uncontrollable vomiting	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
146. Puerperal septicaemia	31	..	..	..	1	..	2	..	..	2	..	1	1	..	..	1	..	..	1	1	..	2
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	14	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..
148. Puerperal albuminuria and convulsions	28	1	1	1	1	1	2	..	2	..	..	..	..	..	..	..	..	..	..	1	..	..
149. Following childbirth (not otherwise defined)	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																						
Total	97	..	1	..	2	1	2	4	..	4	1	4	2	1	1	1	..	..	2	5	2	2
151. Gangrene	56	..	1	..	1	..	1	3	..	3	1	2	2	1	1	1	..	..	1	1	2	1
152. Furuncle	4	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..
153. Acute abscess	14	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	1
154. Other diseases of the skin and annexa	23	..	..	..	1	1	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	..
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																						
Total	29	..	..	..	..	..	2	..	1	..	..	3	..	..	..	2	..	..	..	1	1	..
155. Diseases of the bones (mastoid and tuberculosis excepted)	23	..	..	..	..	..	2	..	1	..	..	3	..	..	..	2	..	..	..	..	1	..
156. Diseases of the joints (tuberculosis and rheumatism excepted)	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
158. Other diseases of the organs of locomotion	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
CLASS XI.—MALFORMATIONS.																						
Total	235	1	..	2	8	9	7	3	5	3	4	7	3	3	3	2	3	2	2	10	6	1
159. Congenital malformations (stillbirths not included)	235	1	..	2	8	9	7	3	5	3	4	7	3	3	3	2	3	2	2	10	6	1
159A. Congenital hydrocephalus	15	..	..	..	..	2	..	1	..	..	..	..	..	..	2	..	..	..	..	2	..	..

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Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
6	4	4	3	..	2	3	1	2	2	3	3	2	2	2	1	4	1	1	2	..	4	1	5	1	..	..	..	1	5	2	3	2	4	324
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1	...	...	1	...	30
...	...	...	...	1	...	1	1	...	...	...	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	39
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	46
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
1	3	3	...	..	1	1	1	4	3	2	..	...	3	2	..	1	..	2	1	2	4	1	7	..	2	1	4	4	1	2	5	1	8	396
...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	2	...	1	36
...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	10
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	15
...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	3	...	...	1	...	...	...	1	1	...	1	45
...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	51
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	5
...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12
...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	15
...	1	1	...	..	1	...	...	2	1	...	...	...	1	...	...	1	...	1	...	...	3	...	...	...	1	..	1	...	1	...	1	...	3	120
...	1	...	...	...	...	...	1	...	...	2	...	...	1	...	...	...	...	...	...	...	...	1	2	...	...	...	1	...	...	...	...	1	1	34
...	...	1	...	...	...	...	...	2	2	...	...	...	...	1	...	...	...	1	...	2	...	1	1	...	1	...	1	4	...	...	...	...	1	97
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	13
3	2	3	2	..	..	1	3	..	1	2	5	2	4	..	2	2	..	1	1	..	2	1	4	5	1	..	4	3	1	..	2	2	3	211
3	1	2	...	..	..	..	1	..	1	1	3	1	2	..	..	2	..	1	..	..	1	..	3	5	..	..	1	3	..	..	1	1	1	102
...	...	1	...	..	..	..	...	..	...	...	...	...	...	..	..	...	..	...	..	..	...	..	...	...	..	..	...	...	..	..	1	...	...	18
...	...	...	...	..	..	1	1	..	..	1	1	...	1	..	1	...	..	...	..	..	...	1	...	...	1	..	1	...	..	..	...	...	...	44
...	1	...	2	..	..	..	1	..	..	...	1	1	1	..	1	...	..	...	1	..	..	1	1	..	..	..	2	..	1	..	...	1	2	47
1	1	...	1	1	..	..	1	..	..	...	..	1	1	..	..	2	..	1	..	..	..	..	1	..	..	..	2	..	..	..	1	1	4	88
1	1	...	1	1	..	..	1	..	..	...	..	1	1	..	..	2	..	..	..	..	..	..	1	..	..	..	2	..	..	..	...	...	2	65
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	..	..	..	...	..	..	..	...	..	..	..	...	1	2	19
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	4
7	3	6	6	..	..	..	7	8	2	2	1	9	2	4	2	4	2	7	..	2	2	5	7	8	5	2	8	4	2	5	4	3	22	485
7	3	6	6	..	..	..	7	8	2	2	1	9	2	4	2	4	2	7	..	2	2	5	7	8	5	2	8	4	2	5	4	3	22	485
...	1	2	...	..	..	..	...	1	..	...	...	1	...	1	..	...	..	...	..	..	..	..	...	..	..	..	1	..	..	..	...	...	1	33

TABLE 43—CAUSES OF DEATH FOR COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
159B. Congenital malformations of the heart	113	1	..	2	5	3	4	1	3	1	1	2	2	1	..	..	1	..	2	7	3	..
159C. Others under this title	107	..	..	..	3	4	3	1	2	2	3	5	1	2	1	2	2	2	..	1	3	1
CLASS XII.—DISEASES OF EARLY INFANCY																						
Total	1,019	7	18	7	21	17	68	5	6	24	11	40	10	13	2	29	17	7	13	31	20	7
160. Congenital debility, icterus and sclerema	165	1	4	..	1	2	19	1	..	2	2	5	1	1	..	3	3	1	2	7	1	3
161. Premature birth, injury at birth	747	6	10	7	20	12	42	3	6	20	6	32	9	11	2	24	12	5	10	21	16	3
161A. Premature birth	628	3	7	7	17	9	39	2	6	13	5	27	7	9	2	23	12	4	7	16	16	3
161B. Injury at birth	119	3	3	..	3	3	3	1	..	7	1	5	2	2	..	1	..	1	3	5	..	..
162. Other diseases peculiar to early infancy	106	..	4	..	..	3	7	1	..	2	3	3	..	1	..	2	2	1	1	3	3	1
162A. Specified diseases	97	..	4	..	..	3	5	1	..	1	3	3	..	1	..	2	2	1	1	3	3	1
162B. Unspecified causes under 3 months	9	..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
163. Lack of care	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
CLASS XIII.—OLD AGE.																						
Total	380	1	6	7	5	3	5	5	7	13	14	5	3	6	..	11	21	3	9	7	11	7
164. Senility	380	1	6	7	5	3	5	5	7	13	14	5	3	6	..	11	21	3	9	7	11	7
CLASS XIV.—EXTERNAL CAUSES.																						
Total	1,289	4	25	14	26	25	51	11	18	14	20	61	15	8	12	22	14	7	22	23	45	15
164-174. Suicides	146	..	2	2	4	2	3	..	..	1	4	7	..	2	4	4	3	1	3	4	6	1
165. Suicide by solid or liquid poisons (corrosive substances excepted)	15	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
166. Suicide by corrosive substances	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
167. Suicide by poisonous gas	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
168. Suicide by hanging or strangulation	52	..	..	2	..	..	1	..	..	1	1	3	..	1	3	1	1	1	2	1	1	..
169. Suicide by drowning	23	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	1	..	1	1	..	..
170. Suicide by firearms	31	..	1	..	1	2	1	..	..	..	1	2	..	..	..	1	1	..	..	..	4	..
171. Suicide by cutting or piercing instruments	14	..	..	..	..	..	..	..	..	..	2	..	..	1	1	..	..	..	..	..	1	1
172. Suicide by jumping from high places	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
173. Suicide by crushing	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
174. Other suicides	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..
175. Poisoning by food	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
176. Poisoning by venomous animals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
177. Other acute accidental poisonings (gas excepted)	12	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..
178. Conflagration	35	..	2	1	3	7	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
179. Accidental burns and scalds (conflagration excepted)	55	..	2	1	2	..	6	..	..	..	..	5	..	..	..	..	..	..	..	..	5	1
180. Accidental mechanical suffocation	19	..	..	..	..	..	..	..	3	..	..	1	..	..	..	..	1	..	..	..	..	..
180A. Overlaying	3	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..
180B. Asphyxia	16	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
181. Accidental absorption of irrespirable or poisonous gas	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..
182. Accidental drowning	259	..	6	1	3	4	12	..	4	3	5	17	1	3	1	1	4	1	5	3	5	2
183. Accdental traumatism by firearms	23	..	..	1	..	1	1	..	..	..	..	1	1	..	..	..	..	1	..	1	1	1
184. Accidental traumatism by cutting or piercing instruments	3	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
185. Accidental traumatism by fall	109	..	..	..	3	3	3	1	5	3	3	3	..	..	3	4	..	..	..	3	7	..
186. Accidental traumatism in mines and quarries	22	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186A. Coal mines	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186B. Other mines	22	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
187. Accidental traumatism by machines	22	..	..	..	..	..	1	2	1	..	..	1	..	..	..	..	..	1	..	..	..	1
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	362	2	12	5	4	2	11	5	2	6	6	18	12	1	1	4	4	1	7	5	7	9
188A. Railroad accidents	111	..	11	1	..	..	6	..	1	..	2	2	3	1	1	1	1	..	2	..	2	5
188B. Street car accidents	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
188C. Automobile accidents	162	..	..	4	2	1	2	3	..	5	3	14	8	..	..	2	3	..	5	4	4	..
188D. Aeroplane and balloon accidents	4	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
188E. Injuries by other vehicles	31	1	..	..	1	1	1	1	..	1	..	..	1	..	..	..	..	..	..	..	1	..
188F. Other crushing	54	1	1	..	1	..	2	1	1	..	1	1	..	..	..	1	..	1	..	1	..	4

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928.—Continued

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
4	1	1	3	..	..	..	6	4	1	1	..	2	1	..	..	2	1	4	..	1	1	1	4	4	5	1	3	3	1	2	4	..	13	226
3	1	3	3	..	..	..	1	3	1	1	..	7	1	3	2	2	1	3	..	1	1	4	3	4	..	1	4	1	1	3	..	3	8	226
26	23	19	15	4	7	4	21	12	40	22	21	18	15	13	6	8	4	41	6	5	37	25	31	17	42	2	29	9	7	18	19	14	66	2,323
6	3	1	2	..	..	..	1	1	6	3	3	1	2	1	1	2	1	13	3	..	5	8	7	3	12	..	3	1	1	3	5	..	8	341
19	19	15	11	3	7	4	19	10	28	18	18	16	13	10	5	5	2	25	3	3	24	14	21	11	21	2	25	6	6	12	12	13	50	1,750
18	15	15	9	3	4	3	16	10	25	12	14	13	10	6	3	5	1	25	2	3	23	12	14	9	19	2	23	5	5	9	9	11	41	1,477
1	4	...	2	..	3	1	3	..	3	6	4	3	3	4	2	...	1	..	1	..	1	2	7	2	2	..	2	1	1	3	3	2	9	273
1	1	3	2	1	..	..	1	1	6	1	..	1	..	2	..	1	1	3	..	2	7	3	3	3	9	..	1	2	..	3	2	1	8	230
1	1	3	2	1	..	..	1	1	6	1	..	1	..	2	..	..	1	3	..	1	6	3	3	3	6	..	1	2	..	3	2	1	8	221
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	3	...	...	...	...	...	...	...	...	9
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2
10	4	12	15	2	4	4	1	..	4	2	11	7	6	3	4	5	4	4	6	..	26	1	10	6	3	2	1	12	7	1	26	8	20	636
10	4	12	15	2	4	4	1	..	4	2	11	7	6	3	4	5	4	4	6	..	26	1	10	6	3	2	1	12	7	1	26	8	20	636
39	33	18	19	5	38	5	38	23	18	40	17	13	24	25	18	24	9	7	8	17	19	8	44	20	45	14	33	14	16	76	26	14	70	2,638
3	4	1	6	..	6	..	2	1	3	5	2	3	2	1	3	3	..	..	2	1	..	1	8	2	1	1	1	2	1	12	2	2	12	285
...	...	1	1	..	2	..	2	..	..	1	1	...	...	..	..	..	..	..	..	..	..	..	...	..	..	..	..	..	..	1	...	...	2	28
...	...	...	...	..	...	..	...	..	..	...	...	1	...	..	..	..	..	..	..	..	..	..	...	..	..	..	..	..	..	...	...	...	1	33
1	...	...	...	..	...	..	...	..	..	...	...	...	1	..	..	..	..	..	..	..	..	..	...	..	..	..	..	..	..	...	...	...	3	25
1	2	...	1	..	2	..	...	1	1	3	..	2	1	..	3	..	..	..	1	..	..	1	5	..	1	..	..	..	..	4	2	..	2	78
1	1	...	3	..	...	..	...	..	..	1	...	...	...	..	..	...	..	..	..	..	..	..	2	1	..	..	1	1	..	3	..	1	2	33
...	1	...	...	..	2	..	...	..	1	1	...	...	...	1	..	3	...	..	1	..	..	..	...	1	..	1	..	1	1	1	..	..	2	55
...	...	...	1	..	...	..	...	..	..	...	1	...	...	..	..	...	..	..	1	..	..	..	1	..	..	..	..	..	..	3	..	1	...	22
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	...	7
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	...	2
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	...	2
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	1	..	..	..	..	..	...	..	..	..	..	1	..	...	..	..	...	11
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	...	1
...	...	...	...	..	1	..	...	1	..	...	1	...	1	..	..	...	..	..	..	1	..	1	...	..	..	..	1	..	..	1	1	..	...	30
1	1	...	...	..	...	..	2	..	..	1	..	...	2	..	..	...	..	..	..	..	..	..	2	1	..	..	3	..	..	1	..	..	...	44
2	2	...	1	..	..	2	2	1	2	2	2	...	3	..	..	2	..	..	1	1	..	..	1	..	3	1	2	..	3	..	..	..	..	143
1	1	...	...	..	..	..	1	..	..	...	..	...	1	..	1	...	1	..	..	..	..	..	...	1	..	1	1	1	..	1	1	...	2	28
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	...	..	..	...	4
1	1	...	...	..	...	..	1	..	..	...	..	...	1	..	1	...	1	..	..	..	..	..	...	1	..	1	1	1	..	1	1	...	2	24
2	...	...	...	..	...	..	1	..	..	...	...	...	...	..	..	...	..	..	1	..	..	..	...	..	1	..	..	..	..	...	..	..	...	41
11	5	3	5	1	13	1	2	9	8	7	3	1	2	11	..	2	2	2	2	3	1	12	5	12	4	7	2	1	19	2	3	15	373
1	...	...	...	..	..	1	...	..	1	1	..	...	1	2	..	1	1	..	..	1	..	1	...	..	..	..	..	..	..	1	...	1	1	40
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	1	...	...	..	..	..	..	..	...	..	..	..	..	..	..	...	..	1	...	7
2	3	1	3	1	5	..	3	2	1	2	3	3	4	1	..	2	..	1	..	..	1	..	3	4	3	..	2	1	2	5	4	2	4	325
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	11	..	8	..	..	...	..	..	...	69
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	11	..	8	..	..	...	..	..	...	68
...	1	1	...	..	...	..	...	1	..	1	..	...	2	..	2	...	..	..	..	..	..	..	...	..	1	..	..	1	1	2	1	..	1	51
12	8	7	2	1	9	..	18	7	3	16	4	5	3	6	6	5	3	4	1	8	9	1	12	3	8	6	5	5	6	24	10	3	18	775
2	...	4	1	..	3	..	2	1	1	8	..	...	3	2	..	1	1	1	..	4	5	1	5	1	4	5	2	..	3	5	2	..	5	168
...	...	...	...	..	...	..	...	..	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	..	...	..	..	..	..	...	..	..	...	19
8	4	3	...	1	3	..	11	1	1	5	2	5	...	3	5	4	2	2	..	..	2	..	3	2	1	..	..	2	3	9	6	2	12	437
...	...	...	...	..	...	..	...	1	..	...	...	...	...	..	..	...	..	..	..	..	..	..	...	2	...	..	..	..	..	...	..	..	...	6
2	2	...	1	..	...	..	3	1	..	3	1	...	...	..	1	...	..	1	..	..	2	..	...	..	...	..	..	1	1	..	2	1	1	54
...	2	...	...	..	...	3	2	3	1	...	1	...	...	1	..	...	..	..	1	4	..	..	2	..	3	1	2	2	..	10	..	..	..	91

TABLE 43—CAUSES OF DEATH BY COUNTIES (EXCLUSIVE OF

CAUSES OF DEATH	Total	Addington	Algoma	Brant	Bruce	Carleton	Cochrane	Dufferin	Dundas	Durham	Elgin	Essex	Frontenac	Glengarry	Grenville	Grey	Haldimand	Haliburton	Halton	Hastings	Huron	Kenora
189. Injuries by animals (poisoning excepted)	11	..	..	..	..	..	..	1	..	..	1	1	..	..	..	1	..	..	..	1	..	..
192. Starvation (deprivation of food or water)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
193. Excessive cold	10	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
194. Excessive heat	4	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..
195. Lightning	14	..	..	..	1	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..
196. Other accidental electric shocks	10	..	..	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
197-199. Homicides	20	..	..	..	..	..	..	..	1	..	..	2	..	..	1	..	..	..	..	..	..	..
197. Homicide by firearms	4	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..
198. Homicide by cutting or piercing instruments	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
199. Homicide by other means	16	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..
201. Fracture (cause not specified)	101	2	..	3	3	2	..	1	1	1	1	3	1	1	1	7	2	1	4	4	10	..
202. Other external violence (cause specified)	40	..	1	..	1	1	1	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..
203. External violence (cause not specified)	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
CLASS XV.—ILL-DEFINED DISEASES.																						
Total	125	..	2	1	4	2	6	..	..	3	3	..	..	2	..	6	..	..	1	7	4	1
204. Sudden death	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
205. Cause of death not specified or ill-defined	121	..	1	1	4	2	6	..	..	3	3	..	..	2	..	6	..	..	1	7	4	1
205A. Ill-defined	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
205B. Not specified or unknown	30	..	1	..	..	1	3	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..
205C. Heart failure	87	..	..	1	4	1	3	..	..	3	2	..	..	1	..	5	..	..	..	7	4	1
205D. Syncope	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..

CITIES AND TOWNS OF 5,000 AND OVER)—ONTARIO, 1928—Concluded

Kent	Lambton	Lanark	Leeds	Lennox	Lincoln	Manitoulin	Middlesex	Muskoka	Nipissing	Norfolk	Northumberland	Ontario	Oxford	Parry Sound	Peel	Perth	Peterborough	Prescott	Prince Edward	Rainy River	Renfrew	Russell	Simcoe	Stormont	Sudbury	Thunder Bay	Timiskaming	Victoria	Waterloo	Welland	Wellington	Wentworth	York	Grand total, including cities and towns
...	...	1	...	..	..	..	1	..	..	...	..	..	...	..	..	2	1	..	..	..	1	..	...	..	..	..	..	..	..	..	...	..	...	15
...	...	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	...	..	...	1
...	...	...	...	..	1	..	...	..	..	1	1	..	...	..	..	...	..	..	..	..	..	..	1	..	2	1	1	..	..	..	...	..	...	13
...	1	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	...	..	...	8
...	1	...	...	..	..	..	...	..	..	...	..	..	...	..	1	1	..	..	..	..	4	..	1	..	..	..	..	..	..	..	...	..	2	16
...	1	...	...	..	1	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	2	1	..	..	1	..	..	1	..	...	28
...	...	...	...	..	..	..	...	..	..	...	..	..	...	2	2	...	..	..	..	..	..	..	...	2	2	..	..	..	..	..	2	..	1	61
...	...	...	...	..	..	..	...	..	..	...	..	..	...	1	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	1	..	...	11
...	...	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	...	..	...	4
...	...	...	...	..	..	..	...	..	..	...	..	..	...	1	2	...	..	..	..	..	..	..	...	2	2	..	..	..	..	..	1	..	1	5	46
3	5	2	1	1	2	..	5	1	..	3	1	1	3	1	1	4	..	..	1	1	1	1	1	..	..	..	..	1	2	1	2	1	7	191
1	...	2	1	1	..	1	1	..	..	1	..	...	...	1	1	2	..	..	..	2	..	2	3	..	..	..	1	..	..	6	3	...	3	80
...	...	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	...	..	...	2
1	2	2	...	..	2	..	2	1	5	3	..	6	2	2	2	...	4	3	2	4	4	..	4	2	9	3	2	1	1	5	...	...	9	181
...	...	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	1	1	..	..	..	..	...	..	1	..	..	..	..	..	...	..	...	6
1	2	2	...	..	2	..	2	1	5	3	..	6	2	2	2	...	3	2	2	4	4	..	4	2	8	3	2	1	1	5	...	...	9	175
...	...	...	...	..	..	..	...	..	..	...	..	..	1	..	..	...	..	..	..	1	..	..	...	..	..	..	..	..	..	1	...	..	...	7
...	1	...	...	..	1	..	...	..	4	1	..	..	..	..	..	...	..	..	..	2	..	..	...	..	7	3	1	..	..	2	...	..	...	38
1	1	2	...	..	1	..	2	1	1	2	..	6	1	2	2	...	3	2	2	1	4	..	4	2	1	..	1	1	1	2	...	...	9	129
...	...	...	...	..	..	..	...	..	..	...	..	..	...	..	..	...	..	..	..	..	..	..	...	..	..	..	..	..	..	..	...	..	...	1

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
DEATHS—ALL CAUSES. **Total**	**16,999**	**6,962**	**1,471**	**1,645**	**1,122**	**689**	**403**	**293**	**445**	**228**	**305**
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES.											
Total	2,006	765	147	236	148	81	45	41	69	16	32
1. Typhoid and paratyphoid fever	22	5	5	2	.....	1	1	1	.....	.....	1
1A. Typhoid fever	22	5	5	2	.....	1	1	1	.....	.....	1
4. Undulant fever	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
5. Malaria	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
7. Measles	27	17	1	.....	3	3	.....	1	.....	.....	.....
8. Scarlet fever	25	6	1	7	1	.....	2	.....	.....	.....	1
9. Whooping-cough	83	29	6	17	5	1	3	1	2	.....	.....
10. Diphtheria	121	50	6	23	3	6	5	1	1	3	1
11. Influenza	735	281	47	64	72	34	17	16	24	3	16
11A. Influenza, sole cause	57	22	2	3	6	2	2	.....	4	.....	1
11B. Influenza, with phthisis	8	4	.....	2	1	.....	.....	.....	.....	.....	.....
11C. Influenza, with bronchitis	24	11	4	3	.....	.....	.....	.....	.....	1	.....
11D. Influenza, with pneumonia	409	167	29	27	48	18	9	6	12	1	7
11E. Influenza, with other respiratory diseases	9	.....	1	1	1	2	.....	.....	.....	.....	.....
11F. Influenza, with diseases and accidents of pregnancy and parturition	8	2	.....	1	1	.....	.....	1	1	.....	.....
11G. Influenza, with other causes	220	75	11	27	15	12	6	9	7	1	8
13. Mumps	7	2	.....	1	.....	.....	.....	.....	.....	.....	.....
16. Dysentery	10	5	1	.....	.....	.....	.....	.....	.....	.....	.....
21. Erysipelas	64	32	6	6	4	.....	3	.....	.....	.....	1
22. Acute anterior poliomyelitis	14	6	2	2	1	.....	.....	.....	.....	.....	.....
23. Lethargic encephalitis	31	10	1	3	6	1	.....	1	1	.....	.....
24. Meningococcus meningitis	23	8	2	2	1	3	1	1	.....	.....	.....
25. Other epidemic and endemic diseases	8	4	1	1	1	.....	.....	.....	.....	.....	.....
25A. Chicken-pox	4	1	1	1	1	.....	.....	.....	.....	.....	.....
25B. German measles	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25C. Others under this title	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
29. Tetanus	11	4	2	1	.....	2	.....	.....	.....	.....	.....
30. Mycoses	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
31-37. Tuberculosis	653	231	49	92	45	23	12	14	36	8	10
31. Tuberculosis of the respiratory system	507	182	33	74	37	17	10	9	33	6	7
32. Tuberculosis of the meninges and central nervous system	48	18	6	3	1	4	.....	1	1	.....	1
33. Tuberculosis of the intestines and peritoneum	29	7	1	7	3	1	.....	1	1	1	1
34. Tuberculosis of the vertebral column	18	5	3	2	2	.....	.....	2	.....	.....	.....
35. Tuberculosis of the joints	8	4	1	2	1	.....	.....	.....	.....	.....	.....
36. Tuberculosis of other organs	15	4	1	2	.....	.....	2	.....	.....	.....	1
36C. Lymphatic system (mesenteric, and retroperitoneal glands excepted)	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
36D. Tuberculosis of the genito-urinary system	12	2	1	2	.....	.....	2	.....	.....	.....	1
36E. Tuberculosis of organs other than above	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
37. Disseminated tuberculosis	28	11	4	2	1	1	.....	1	1	1	.....
37A. Disseminated tuberculosis, acute	18	6	4	2	1	.....	.....	1	.....	.....	.....
37B. Disseminated tuberculosis, chronic or unstated	10	5	.....	.....	.....	1	.....	.....	1	1	.....
38. Syphilis	82	44	7	6	3	3	1	1	1	1	.....
40. Gonococcus infection	6	2	.....	1	.....	.....	.....	.....	.....	.....	1
41. Purulent infection, septicaemia	78	27	9	7	3	4	.....	4	4	1	1
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.											
Total	2,614	1,092	238	207	191	108	57	43	77	51	49
43-49. Cancer	1,789	761	177	141	136	69	39	27	52	25	34
43. Cancer of the buccal cavity	70	33	6	5	6	2	.....	.....	3	.....	2
44. Cancer of the stomach and liver	549	208	51	51	42	21	12	12	15	14	13
45. Cancer of the peritoneum, intestines and rectum	340	158	31	17	27	15	7	5	12	4	6
46. Cancer of the female genital organs	192	84	16	17	11	8	8	3	6	1	3

ONTARIO, 1928.

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
211	331	241	199	214	222	216	220	306	181	239	172	227	129	173	155	
42	47	20	26	29	32	33	22	34	9	35	21	36	11	12	17	
.....	2	.....	.....	.....	.....	1	1	.....	.....	1	1	.....	.....	.....	.....	1
.....	2	.....	.....	.....	.....	1	1	.....	.....	1	1	.....	.....	.....	.....	1A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	8
1	.....	1	.....	.....	.....	1	2	1	.....	.....	.....	1	.....	.....	.....	9
.....	1	2	2	2	.....	1	.....	.....	.....	1	.....	2	1	.....	1	10
1	6	.....	1	1	1	1	.....	.....	.....	3	.....	7	.....	1	.....	11
15	8	4	9	16	12	17	9	18	6	9	5	14	5	7	7	11A
.....	3	.....	2	2	3	2	1	1	.....	1	.....	.....	.....	.....	.....	11B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	11C
1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	2	.....	.....	.....	11D
9	4	3	2	10	6	6	4	11	3	4	2	7	4	3	7	11E
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	1	1	.....	.....	11F
.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	11G
5	1	1	5	4	3	7	4	5	2	3	2	4	.....	3	.....	13
.....	.....	.....	1	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	16
1	.....	1	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	21
2	3	.....	.....	1	1	.....	1	1	1	2	.....	.....	.....	.....	.....	22
.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	23
1	.....	.....	3	.....	.....	.....	1	1	.....	.....	2	.....	.....	.....	.....	24
.....	1	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	25A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	25C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	30
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	
19	21	10	10	5	15	6	3	6	2	8	10	8	3	2	5	31–37
16	14	9	8	4	10	4	.....	6	2	8	6	5	2	2	3	31
1	3	.....	2	.....	2	1	2	.....	.....	.....	.....	1	1	.....	.....	32
.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	.....	1	33
.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	34
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	36
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36C
2	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36D
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	36E
.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	2	.....	.....	.....	1	37
.....	1	.....	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	.....	.....	37A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	37B
2	3	.....	.....	.....	.....	2	1	2	.....	1	.....	2	.....	.....	2	38
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	40
.....	1	.....	.....	2	.....	3	3	2	.....	1	2	1	1	1	1	41
30	47	32	33	36	27	25	43	42	34	25	32	33	18	28	16	
20	32	21	23	28	19	10	21	28	28	17	19	18	11	22	11	43–49
1	1	.....	.....	2	.....	1	1	.....	3	2	1	.....	.....	.....	1	43
4	14	7	7	12	8	4	7	10	8	5	6	5	3	10	.....	44
7	4	6	6	3	4	1	8	4	3	3	.....	3	2	2	2	45
1	7	1	1	3	1	2	3	3	3	.....	1	2	.....	3	4	46

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
47. Cancer of the breast	178	85	16	14	14	4	4	3	4	1	6
48. Cancer of the skin	31	11	2	1	1	3	1	....	2	....	....
49. Cancer of other or unspecified organs	429	182	55	36	35	16	7	4	10	5	4
49A. Cancer of eye and ear	6	1	1	2	1	1	....	....	....	....	....
49B. Cancer of circulatory system	43	14	7	5	2	3	1	....	....	....	....
49C. Cancer of respiratory system	71	41	11	3	6	....	....	1	1	....	....
49D. Cancer of digestive system	69	23	6	5	6	2	....	1	1	....	1
49E. Cancer of genito-urinary organs	164	60	23	15	16	10	3	2	8	4	2
49F. Cancer of bones and joints	23	14	3	2	3	....	....	....	....	....	1
49G. Cancer of other specified organs	39	24	1	3	....	....	2	....	....	1	....
49H. Generalized cancer	9	4	2	1	1	....	1	....	....	....	....
49I. Unspecified	5	1	1	....	....	....	....	....	....	....	....
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	25	11	2	4	2	....	....	....	....	1	....
51. Acute rheumatic fever	64	27	3	5	5	5	....	1	1	5	....
52. Chronic rheumatism, osteo-arthritis, gout	10	....	2	1	3	....	....	....	....	....	....
53. Scurvy	2	1	....	....	....	....	....	....	....	....	....
54. Pellagra	2	1	....	....	....	....	....	....	....	....	....
56. Rickets	22	7	2	1	....	1	2	2	1	2	....
57. Diabetes mellitus	232	83	20	20	18	16	10	7	2	6	4
58. Anaemia, chlorosis	129	48	5	12	9	6	2	1	8	4	1
58A. Pernicious anaemia	112	44	5	10	9	3	2	1	6	4	1
58B. Other anaemias and chlorosis	17	4	....	2	....	3	....	....	2	....	....
59. Diseases of the pituitary gland	2	2	....	....	....	....	....	....	....	....	....
60. Diseases of the thyroid gland	144	66	9	8	8	5	....	3	8	5	7
60A. Exophthalmic goiter	84	35	3	4	6	3	....	....	7	5	4
60B. Other diseases of the thyroid gland	60	31	6	4	2	2	....	3	1	....	3
61. Diseases of the parathyroid glands	7	2	....	....	....	....	1	....	....	....	....
62. Diseases of the thymus	35	15	4	2	1	1	....	....	1	1	2
63. Diseases of the adrenals (Addison's disease)	7	3	1	....	1	....	....	....	....	....	....
64. Diseases of the spleen	10	6	....	1	....	....	1	....	....	....	....
65. Leukaemia, lymphadenoma	54	25	3	6	3	3	1	1	4	....	1
65A. Leukaemia	32	13	1	5	3	2	1	1	3	....	1
65B. Lymphadenoma (Hodgkin's disease)	22	12	2	1	....	1	....	....	1	....	....
66. Alcoholism	50	21	6	3	3	....	....	....	....	2	....
66A. Delirium tremens	5	2	....	1	....	....	....	....	....	....	....
66B. Acute alcoholism	36	16	5	2	2	....	....	....	....	2	....
66C. Chronic alcoholism	9	3	1	....	1	....	....	....	....	....	....
67. Chronic poisoning by mineral substances	4	1	1	1	....	1	....	....	....	....	....
67A. Chronic lead poisoning	3	....	1	1	....	1	....	....	....	....	....
67B. Others under this title	1	1	....	....	....	....	....	....	....	....	....
68. Chronic organic poisoning	3	2	1	....	....	....	....	....	....	....	....
68A. Chronic morphinism	1	1	....	....	....	....	....	....	....	....	....
68C. Chronic organic poisoning	2	1	1	....	....	....	....	....	....	....	....
69. Other general diseases	23	10	2	2	2	1	1	1	....	....	....
69B. Haemophilia	7	3	1	....	....	....	....	....	....	....	....
69C. Purpura haemorrhagica	6	2	1	1	....	1	1	....	....	....	....
69D. Others under this title	10	5	....	1	2	....	....	1	....	....	....
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.											
Total	1,245	539	121	108	85	36	27	18	33	17	28
70. Encephalitis	36	17	5	3	3	2	1	....	1	1	....
70A. Abscess of brain	11	6	3	....	....	1	1	....	....	....	....
70B. Encephalitis	25	11	2	3	3	1	....	....	1	1	....
71. Meningitis	51	17	6	6	1	7	....	1	....	3	3
71A. Simple meningitis	51	17	6	6	1	7	....	1	....	3	3
72. Tabes dorsalis (locomotor ataxia)	21	19	1	....	....	....	....	....	....	....	1
73. Other diseases of the spinal cord	102	54	5	9	7	....	2	1	4	2	1
74. Cerebral haemorrhage, apoplexy	575	224	81	43	30	12	18	13	19	7	19
74A. Apoplexy	209	60	30	12	14	9	5	9	9	4	11
74B. Cerebral haemorrhage	312	136	47	25	15	2	13	4	8	3	6
74C. Cerebral thrombosis and embolism	54	28	4	6	1	1	....	....	2	....	2
75. Paralysis without specified cause	83	37	2	13	8	4	....	....	2	2	1
75A. Hemiplegia	59	27	2	9	5	3	....	....	1	1	1
75B. Others under this title	24	10	....	4	3	1	....	....	1	1	....
76. General paralysis of the insane	26	12	....	....	10	1	....	....	....	....	....
77. Other forms of mental alienation	32	17	....	3	3	1	2	....	1	....	....
78. Epilepsy	59	19	2	5	8	2	....	....	1	1	....
79. Convulsions (non-puerperal, 5 years or over)	1	....	....	....	1	....	....	....	....	....	....

ONTARIO, 1928.—Continued

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
2	3	.....	2	2	2	1	1	1	3	1	2	4	.....	2	1	47
.....	1	1	1	1	.....	.....	.....	.....	2	3	1	.....	.....	.....	.....	48
5	2	6	6	5	4	1	1	10	6	3	8	4	6	5	3	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49A
1	1	.....	1	.....	.....	.....	.....	.....	1	2	1	2	1	1	.....	49B
.....	.....	.....	2	.....	1	.....	.....	3	.....	.....	.....	.....	1	.....	1	49C
3	1	2	3	2	2	.....	.....	4	2	.....	2	2	.....	1	.....	49D
1	.....	2	.....	3	1	.....	.....	2	3	.....	5	.....	.....	3	1	49E
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49F
.....	.....	1	.....	.....	.....	1	1	1	.....	.....	.....	.....	3	.....	1	49G
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49H
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	49I
.....	.....	.....	1	.....	1	.....	.....	.....	2	.....	1	.....	.....	.....	.....	50
.....	2	.....	2	1	.....	1	1	1	.....	2	1	.....	.....	.....	1	51
.....	2	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	52
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	53
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	56
2	4	3	4	2	.....	3	7	3	1	3	4	3	2	4	1	57
4	2	3	1	3	2	6	3	3	1	.....	1	3	1	.....	.....	58
3	2	3	1	3	2	5	2	2	1	.....	1	1	1	.....	.....	58A
1	.....	.....	.....	.....	.....	1	1	1	.....	.....	.....	2	.....	.....	.....	58B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59
2	2	3	.....	1	1	.....	5	2	.....	2	3	3	1	.....	.....	60
2	2	.....	.....	1	.....	.....	4	2	.....	1	2	2	1	.....	.....	60A
.....	.....	3	.....	.....	1	.....	1	.....	.....	1	1	1	.....	.....	.....	60B
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	1	61
.....	1	.....	1	.....	1	1	.....	.....	1	.....	1	1	.....	.....	1	62
.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	63
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	64
.....	.....	.....	.....	.....	.....	.....	3	1	.....	.....	.....	1	1	1	.....	65
.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	65A
.....	.....	.....	.....	.....	.....	.....	2	1	.....	.....	.....	1	.....	1	.....	65B
1	2	1	1	.....	3	2	1	1	.....	.....	.....	1	1	.....	1	66
1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66A
.....	1	1	1	.....	2	.....	1	.....	.....	.....	.....	1	1	.....	1	66B
.....	1	.....	.....	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	66C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68C
.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	1	.....	.....	.....	.....	69
.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	69B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	69D
6	24	20	20	19	11	12	11	25	10	12	10	13	13	21	6	
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	70
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70A
2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	70B
.....	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	1	2	.....	.....	71
.....	1	.....	.....	.....	1	1	.....	.....	.....	1	.....	1	2	.....	.....	71A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72
.....	.....	1	1	1	1	1	.....	3	.....	1	3	1	1	1	2	73
2	15	8	9	10	7	6	6	12	7	6	4	6	5	4	2	74
1	3	4	9	4	1	3	3	3	3	4	2	2	1	2	1	74A
1	11	4	.....	5	6	1	3	8	4	.....	1	2	4	2	1	74B
.....	1	.....	.....	1	.....	2	.....	1	.....	2	1	2	.....	.....	.....	74C
.....	2	1	1	3	.....	.....	.....	2	.....	.....	.....	1	1	2	1	75
.....	2	1	1	1	.....	.....	.....	1	.....	.....	.....	1	1	2	.....	75A
.....	.....	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	75B
.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	76
.....	.....	2	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	.....	77
.....	.....	1	1	1	1	.....	2	.....	.....	1	.....	1	1	12	.....	78
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
80. Infantile convulsions (under 5 years of age)	31	8	3	4	2	....	....	3	1	1	....
81. Chorea	4	1	1	1	....	....	....	....	....	....	....
82. Neuralgia and neuritis	9	2	1	1	1	....	....	....	....	....	....
83. Softening of the brain	8	3	....	1	....	1	....	....	....	....	....
84. Other diseases of the nervous system	112	56	12	9	5	3	4	....	3	....	3
85. Diseases of the eye and annexa	6	2	1	....	....	....	....	....	....	....	....
86. Diseases of the ear and of the mastoid process	89	51	1	10	6	3	....	....	1	....	....
86A. Diseases of the ear	48	30	1	5	1	2	....	....	1	....	....
86B. Diseases of the mastoid process	41	21	....	5	5	1	....	....	....	....	....
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM											
Total	3,827	1,617	326	349	268	126	93	82	107	37	74
87-90. Diseases of the heart	2,392	958	216	246	166	69	64	47	63	32	48
87. Pericarditis	8	3	1	1	....	1	....	....	....	....	....
88. Endocarditis and myocarditis (acute)	89	43	9	12	4	2	....	4	2	2	1
88A. Acute endocarditis	50	28	3	8	....	2	....	2	1	1	....
88B. Acute myocarditis	39	15	6	4	4	....	....	2	1	1	1
89. Angina pectoris	318	130	11	36	28	7	8	11	11	6	4
90. Other diseases of the heart	1,977	782	195	197	134	59	56	32	50	24	43
90A. Valvular disease	335	146	26	21	11	12	4	5	12	5	15
90B. Fatty degeneration of the heart	6	3	....	....	....	1	....	....	....	....	....
90C. Aortic insufficiency	1	....	....	....	....	....	....	....	....	....	....
90D. Chronic endocarditis	266	123	13	32	16	11	7	1	2	3	4
90E. Chronic myocarditis	1,113	435	134	117	76	28	40	23	32	11	19
90F. Others under this title	256	75	22	27	31	7	5	3	4	5	5
91. Diseases of the arteries	1,363	633	107	99	96	56	24	31	40	5	25
91A. Aneurysm	35	12	6	6	1	3	1	....	....	....	1
91B. Arteriosclerosis	1,312	615	101	92	95	51	23	30	39	5	24
91C. Other diseases of the arteries	16	6	....	1	....	2	....	1	1	....	....
92. Embolism and thrombosis (not cerebral)	42	16	2	....	5	....	4	3	1	....	1
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	20	8	1	2	1	....	....	1	3	....	....
94. Diseases of the lymphatic system (lymphangitis, etc.)	6	2	....	1	....	1	....	....	....	....	....
95. Haemorrhage without specified cause	2	....	....	1	....	....	....	....	....	....	....
96. Other diseases of the circulatory system	2	....	....	....	....	....	1	....	....	....	....
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM											
Total	1,619	768	162	128	96	67	32	21	34	17	19
97. Diseases of the nasal fossae and their annexa	12	6	....	....	....	....	1	....	....	....	....
98. Diseases of the larynx	15	8	1	1	1	....	....	....	....	1	....
98A. Laryngismus stridulus	1	1	....	....	....	....	....	....	....	....	....
98B. Laryngitis	12	7	1	....	....	....	....	....	....	1	....
98C. Croup	2	....	....	1	1	....	....	....	....	....	....
99 Bronchitis	49	18	3	2	2	1	2	....	....	....	1
99A. Bronchitis, acute	23	12	1	1	2	....	....	....	....	....	1
99B. Bronchitis, chronic	19	3	2	....	....	1	2	....	....	....	....
99C. Bronchitis, not otherwise defined, under 5 years of age	1	....	....	....	....	....	....	....	....	....	....
99D. Bronchitis, not otherwise defined, 5 years or over	6	3	....	1	....	....	....	....	....	....	....
100. Broncho-pneumonia (including capillary bronchitis)	528	293	50	41	27	17	6	6	10	4	6
100A. Broncho-pneumonia	525	292	50	40	27	17	6	6	10	4	6
100B. Capillary bronchitis	3	1	....	1	....	....	....	....	....	....	....
101. Pneumonia	817	370	85	61	55	37	18	12	15	11	11
101A. Penimonia, lobar	502	241	55	37	31	21	14	10	7	4	4
101B. Pneumonia, not otherwise defined	315	129	30	24	24	16	4	2	8	7	7
102. Pleurisy	80	29	9	8	4	9	3	1	2	....	....
103. Congestion and haemorrhagic infarct of the lung	40	9	6	6	3	....	1	1	6	1	....
104. Gangrene of the lung	3	2	....	1	....	....	....	....	....	....	....
105. Asthma	35	14	5	4	2	1	....	....	....	....	....
106. Pulmonary emphysema	2	2	....	....	....	....	....	....	....	....	....

ONTARIO, 1928.—Continued

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
.....	.....	1	.....	1	.....	.....	.....	2	.....	1	1	1	1	1	.....	80
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	1	1	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	82
.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	83
.....	2	2	3	1	.....	1	1	2	.....	2	2	1	.....	.....	.....	84
.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	85
2	2	2	2	2	.....	2	2	.....	1	.....	.....	1	.....	1	.....	86
2	1	.....	.....	1	.....	2	1	.....	1	.....	.....	.....	.....	.....	.....	86A
.....	1	2	2	1	.....	.....	1	.....	.....	.....	.....	1	.....	1	.....	86B
21	58	63	42	51	38	51	47	68	59	44	55	42	28	49	32	
13	42	35	32	41	32	32	29	46	42	26	29	24	20	29	11	87–90
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	87
1	.....	.....	3	.....	.....	.....	2	.....	1	1	.....	.....	1	1	.....	88
1	.....	.....	2	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	88A
.....	.....	.....	1	.....	.....	.....	1	.....	.....	1	.....	.....	1	1	.....	88B
.....	1	10	1	10	3	2	6	9	10	1	1	5	1	3	3	89
11	41	25	28	31	29	29	21	37	31	24	28	19	18	25	8	90
4	7	12	2	5	11	5	7	6	6	3	3	2	1	3	1	90A
.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90B
.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	90C
2	7	3	3	.....	1	8	2	3	4	5	.....	8	3	5	.....	90D
4	20	9	17	19	12	14	9	17	14	11	13	9	13	14	3	90E
1	7	1	5	6	5	2	3	11	7	5	12	.....	1	3	3	90F
8	13	27	10	10	5	19	16	19	16	18	24	18	7	17	20	91
.....	1	.....	.....	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	.....	91A
8	12	26	10	10	5	17	16	18	16	16	23	18	7	16	19	91B
.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	1	91C
.....	3	.....	.....	.....	.....	.....	2	1	.....	.....	.....	.....	1	2	1	92
.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	93
.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	94
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	95
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	96
18	37	19	21	13	18	18	22	25	14	15	6	16	6	14	13	
2	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	.....	97
.....	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	98
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98A
.....	.....	.....	.....	1	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	98B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	98C
1	4	2	1	2	.....	1	.....	2	.....	2	.....	1	2	.....	2	99
1	2	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	99A
.....	1	1	1	2	.....	.....	.....	2	.....	1	.....	.....	1	.....	2	99B
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	99C
.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	99D
3	14	2	1	4	3	4	10	6	2	2	3	5	3	4	2	100
3	14	2	1	4	2	4	10	6	2	2	3	5	3	4	2	100A
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100B
8	12	14	15	5	13	8	12	12	9	8	2	5	1	8	10	101
1	9	7	5	2	10	4	11	8	4	1	2	2	1	4	7	101A
7	3	7	10	3	3	4	1	4	5	7	.....	3	.....	4	3	101B
2	1	.....	2	.....	1	3	.....	1	1	1	.....	3	.....	.....	.....	102
.....	3	.....	.....	1	.....	1	.....	.....	1	1	.....	.....	.....	.....	.....	103
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	104
.....	1	1	1	.....	1	1	.....	2	1	.....	.....	1	.....	.....	.....	105
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	106

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
107. Other diseases of the respiratory system (tuberculosis excepted)	38	17	3	4	2	2	1	1	1	.....	1
107A. Chronic interstitial pneumonia (including occupational diseases of the lungs	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
107C. Others under this title	36	15	3	4	2	2	1	1	1	.....	1
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM											
Total	1,449	566	108	216	75	60	38	23	33	21	17
108. Diseases of the mouth and annexa	24	6	1	5	1	1	.....	.....	.....	1	....
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	74	39	4	5	2	3	3	4	2	1	1
109A. Adenoid vegetations	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
109B. Pharynx and tonsils	72	39	4	3	2	3	3	4	2	1	1
110. Diseases of the oesophagus	3	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
111. Ulcer of the stomach and duodenum	132	61	17	10	7	7	2	1	3	.....	....
111A. Ulcer of the stomach	69	30	10	9	2	4	.....	.....	1	.....	....
111B. Ulcer of the duodenum	63	31	7	1	5	3	2	1	2	.....	....
112. Other diseases of the stomach (cancer excepted)	57	16	2	16	6	.....	2	1	.....	1	2
113. Diarrhoea and enteritis (under 2 years of age)	335	120	34	90	9	9	10	3	4	5	....
114. Diarrhoea and enteritis (2 years or over)	67	25	4	7	10	3	.....	.....	2	2	3
116. Diseases due to other intestinal parasites	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
116C. Nematodes (other than ankylostoma)	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
117. Appendicitis and typhlitis	270	109	10	32	15	14	4	5	6	4	5
118. Hernia, intestinal obstruction	183	68	12	19	9	9	7	3	8	3	5
118A. Hernia	66	23	3	8	4	3	3	2	1	2	1
118B. Intestinal obstruction	117	45	9	11	5	6	4	1	7	1	4
119. Other doseases of the intestines	40	20	4	3	3	1	.....	1	1	.....	....
120. Acute yellow atrophy of the liver	7	2	.....	.....	1	.....	.....	.....	.....	.....	.....
122. Cirrhosis of the liver	58	25	6	10	1	3	3	2	.....	1	1
122A. Specified as alcoholic	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
122B. Not specified as alcoholic	55	22	6	10	1	3	3	2	.....	1	1
123. Biliary calculi	38	9	2	4	2	4	3	.....	3	.....	....
124. Other diseases of the liver	107	49	5	7	6	3	3	1	3	1	....
125. Diseases of the pancreas	20	8	3	2	.....	1	1	.....	1	1	....
126. Peritonitis without specified cause	33	9	3	6	3	2	.....	2	.....	1	....
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA											
Total	1,260	461	125	129	120	57	39	16	27	20	26
128. Acute nephritis (including unspecified, under 10 years of age)	81	24	4	13	4	4	4	1	3	3	1
129. Chronic nephritis (Bright's disease)	769	278	83	78	94	33	28	7	13	11	14
131. Other diseases of the kidneys and annexa	82	38	11	4	2	4	3	1	2	.....	2
132. Calculi of the urinary passages	20	9	1	3	1	1	.....	.....	.....	.....	....
133. Diseases of the bladder	27	12	2	1	1	.....	.....	.....	2	1	....
134. Diseases of the urethra, urinary abscess, etc	8	6	.....	.....	1	1	.....	.....	.....	.....	....
134A. Stricture of the urethra	4	3	.....	.....	.....	1	.....	.....	.....	.....	....
134B. Other diseases of the urethra	4	3	.....	.....	.....	.....	1	.....	.....	.....	....
135. Diseases of the prostate	164	62	17	17	9	5	1	4	4	4	6
136. Non-venereal diseases of the male genital organs	4	.....	.....	1	.....	1	.....	.....	1	.....	....
137. Cysts and other benign tumours of the ovary	22	5	2	3	3	1	1	1	.....	.....	1
138. Salpingitis and pelvic abscess	19	4	.....	4	1	2	.....	1	.....	.....	....
139. Benign tumours of the uterus	27	10	1	3	.....	4	.....	.....	.....	.....	1
140. Non-puerperal uterine haemorrhage	2	1	.....	1	.....	.....	.....	.....	.....	.....	....
141. Other diseases of the female genital organs	35	12	4	1	5	1	1	1	2	1	1

ONTARIO, 1928.—Continued

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	107
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	107A
2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	107C
28	23	18	11	11	13	22	19	25	14	42	10	17	12	12	15	
.....	1	.....	.....	.....	.....	1	1	.....	.....	3	1	.....	.....	2	.....	108
.....	1	.....	.....	2	1	2	.....	2	1	.....	.....	.....	.....	1	.....	109
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	109A
.....	1	.....	.....	2	1	2	.....	2	1	.....	.....	.....	.....	1	.....	109B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	110
2	2	1	3	1	2	.....	.....	3	.....	4	1	2	.....	1	2	111
1	1	1	3	1	1	.....	.....	.....	.....	3	.....	1	.....	1	.....	111A
1	1	.....	.....	.....	1	.....	.....	3	.....	1	1	1	.....	.....	2	111B.
3	.....	2	1	1	.....	.....	1	.....	1	.....	.....	.....	.....	2	.....	112
8	5	4	.....	1	2	4	2	4	5	6	.....	3	5	.....	2	113
1	.....	1	1	.....	.....	1	1	4	.....	.....	2	.....	.....	.....	.....	114
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	116
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	116C
4	3	3	1	2	1	5	7	5	.....	17	2	5	4	2	5	117
4	4	3	2	2	4	3	.....	1	3	5	1	6	.....	1	1	118
1	2	1	2	.....	3	1	.....	.....	1	2	1	2	.....	.....	.....	118A
3	2	2	.....	2	1	2	.....	1	2	3	.....	4	.....	1	1	118B
.....	2	.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	2	119
.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	1	.....	.....	1	.....	120
.....	.....	1	1	.....	.....	.....	1	.....	1	1	.....	.....	.....	1	.....	122
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	122A
.....	.....	1	1	.....	.....	.....	1	.....	1	1	.....	.....	.....	1	.....	122B
.....	1	.....	1	2	1	2	1	1	.....	1	.....	.....	1	.....	.....	123
3	3	3	1	.....	2	2	1	2	3	4	1	1	1	.....	2	124
1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	125
2	1	.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	1	.....	1	126
16	24	20	12	20	14	15	13	25	13	21	11	10	5	14	7	
1	4	2	2	2	3	1	1	1	.....	1	.....	.....	1	.....	1	128
9	10	12	6	12	4	10	8	16	8	13	4	3	3	10	2	129
.....	4	.....	.....	.....	.....	1	.....	2	3	1	1	2	.....	.....	1	131
.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	1	.....	.....	1	.....	132
.....	.....	1	.....	.....	.....	1	.....	1	1	.....	2	2	.....	.....	.....	133
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	134B
6	3	2	3	5	3	.....	.....	3	.....	4	1	1	1	1	2	135
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	136
.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	1	1	.....	.....	.....	137
.....	.....	.....	.....	.....	.....	1	3	2	.....	.....	.....	1	.....	.....	.....	138
.....	1	1	.....	.....	1	1	.....	.....	.....	.....	1	.....	.....	2	1	139
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	140
.....	1	.....	.....	1	.....	.....	1	.....	1	2	.....	.....	.....	.....	.....	141

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
CLASS VIII.—THE PUERPERAL STATE											
Total	260	111	29	13	6	12	9	6	8	3	6
143. Accidents of pregnancy	24	11	4	.....	2	.....	1	.....	1	.....	1
143A. Abortion	7	3	1	.....	2	.....	.....	.....	1	.....	.....
143B. Ectopic gestation	10	5	2	.....	.....	.....	1	.....	.....	.....	.....
143C. Others under this title	5	2	.....	.....	.....	.....	.....	.....	.....	.....	1
143D. Abortion, self-induced	2	1	1	.....	.....	.....	.....	.....	.....	.....	.....
144. Puerperal haemorrhage	29	13	2	.....	1	2	1	1	4	.....	1
145. Other accidents of labour	40	17	5	1	.....	2	.....	1	1	.....	2
145A. Caesarean section	17	6	2	.....	.....	.....	.....	.....	1	.....	.....
145B. Difficult labour	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
145C. Other surgical operations and instrumental delivery	9	3	3	1	.....	1	.....	.....	.....	.....	.....
145D. Uncontrollable vomiting	12	7	.....	.....	.....	1	.....	1	.....	.....	2
146. Puerperal septicaemia	79	44	7	4	.....	5	4	1	1	1	.....
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	19	6	3	1	2	2	.....	.....	.....	.....	.....
148. Puerperal albuminuria and convulsions	61	19	6	6	.....	1	3	2	1	2	2
149. Following childbirth (not otherwise defined)	8	1	2	1	1	.....	.....	1	.....	.....	.....
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE											
Total	88	33	7	7	8	6	.....	2	3	.....	2
151. Gangrene	32	9	.....	1	4	3	.....	1	3	.....	1
152. Furuncle	13	8	.....	1	.....	1	.....	.....	.....	.....	.....
153. Acute abscess	25	11	5	3	2	1	.....	.....	.....	.....	.....
154. Other diseases of the skin and annexa	18	5	2	2	2	1	.....	1	.....	.....	1
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.											
Total	49	24	2	7	2	2	.....	.....	.....	1	.....
155. Diseases of the bones (mastoid and tuberculosis excepted)	34	16	2	4	2	2	.....	.....	.....	1	.....
156. Diseases of the joints (tuberculosis and rheumatism excepted)	13	6	.....	3	.....	.....	.....	.....	.....	.....	.....
158. Other diseases of the organs of locomotion	2	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
CLASS XI.—MALFORMATIONS.											
Total	217	93	13	21	15	9	7	5	2	6	3
159. Congenital malformations (still-births not included)	217	93	13	21	15	9	7	5	2	6	3
159A. Congenital hydrocephalus	17	8	3	1	.....	.....	1	.....	.....	.....	.....
159B. Congenital malformations of the heart	93	38	3	9	5	4	2	5	1	4	.....
159C. Others under this title	107	47	7	11	10	5	4	.....	1	2	3
CLASS XII.—DISEASES OF EARLY INFANCY											
Total	1,045	410	77	118	37	57	19	12	28	18	19
160. Congenital debility, icterus and sclerema	141	42	17	20	1	3	4	2	4	5	2
161. Premature birth ,injury at birth	802	326	52	90	33	50	14	8	20	12	13
161A. Premature birth	673	279	40	77	29	39	13	6	15	11	11
161B. Injury at birth	129	47	12	13	4	11	1	2	5	1	2
162. Other diseases peculiar to early infancy	101	42	8	8	3	4	1	2	4	1	4
162A. Specified diseases	101	42	8	8	3	4	1	2	4	1	4
163. Lack of care	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

ONTARIO, 1928.—Continued

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
3	7	3	3	5	1	3	1	3	.....	6	.....	9	3	3	7	
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	1	.....	1	143
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	143A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	143B
.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	143C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	143D
.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	144
2	2	1	1	1	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	145
1	.....	1	1	1	.....	.....	1	.....	.....	.....	.....	3	.....	.....	.....	145A
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145B
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145C
.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	145D
.....	1	.....	.....	1	1	.....	.....	.....	.....	3	.....	2	.....	1	3	146
.....	2	.....	1	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	147
1	1	2	.....	2	.....	2	.....	1	.....	2	.....	3	1	2	2	148
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	149
2	1	3	2	1	.....	3	3	1	.....	.....	.....	1	1	1	1	
.....	.....	1	1	.....	.....	1	2	1	.....	.....	.....	1	1	1	1	151
1	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	152
1	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	153
.....	.....	1	.....	.....	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	154
.....	.....	1	.....	2	3	.....	.....	1	.....	.....	.....	2	1	1	.....	
.....	.....	1	.....	1	1	.....	.....	1	.....	.....	.....	2	.....	1	.....	155
.....	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	156
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	158
4	5	2	4	1	2	.....	2	3	4	5	2	5	3	.....	1	
4	5	2	4	1	2	.....	2	3	4	5	2	5	3	.....	1	159
.....	.....	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	159A
3	2	1	3	1	1	.....	1	2	2	3	.....	2	1	.....	.....	159B
1	3	.....	1	.....	.....	.....	1	1	2	1	2	3	1	.....	1	159C
21	21	15	12	6	24	17	19	19	4	10	13	29	14	10	16	
2	1	8	3	1	7	2	2	2	.....	.....	6	2	2	1	2	160
17	18	6	5	4	16	12	14	17	4	9	5	26	11	7	13	161
14	16	4	3	3	12	12	13	15	4	8	4	21	8	5	11	161A
3	2	2	2	1	4	.....	1	2	.....	1	1	5	3	2	2	161B
2	2	1	4	1	1	3	3	.....	.....	1	2	1	.....	2	1	162
2	2	1	4	1	1	3	3	.....	.....	1	2	1	.....	2	1	162A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	163

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
CLASS XIII.—OLD AGE											
Total	187	58	14	13	8	4	15	1	3	5	10
164. Senility	187	58	14	13	8	4	15	1	3	5	10
CLASS XIV.—EXTERNAL CAUSES											
Total	1,089	417	97	82	60	64	20	22	20	15	19
165-174. Suicides	127	68	8	3	7	4	.....	3	2	1	1
165. Suicide by solid or liquid poisons (corrosive substances excepted)	13	6	2	.....	.....	.....	.....	.....	.....	.....	....
166. Suicide by corrosive substances	28	15	2	1	1	2	.....	.....	.....	1	....
167. Suicide by poisonous gas	20	19	.....	.....	1	.....	.....	.....	.....	.....	....
168. Suicide by hanging or strangulation	21	10	2	.....	1	1	.....	1	.....	.....	....
169. Suicide by drowning	8	3	1	1	.....	.....	.....	1	.....	.....	....
170. Suicide by firearms	23	8	.....	.....	2	.....	.....	1	2	.....	1
171. Suicide by cutting or piercing instruments	6	1	.....	1	1	1	.....	.....	.....	.....	....
172. Suicide by jumping from high places	7	6	1	.....	.....	.....	.....	.....	.....	.....	....
173. Suicide by crushing	1	1	.....	.....	.....	1	.....	.....	.....	.....	....
175. Poisoning by food	6	3	1	.....	.....	.....	.....	.....	.....	.....	....
176. Poisoning by venomous animals	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	....
177. Other acute accidental poisonings (gas excepted)	15	8	1	.....	.....	3	.....	1	.....	.....	....
178. Conflagration	8	5	.....	.....	.....	.....	.....	1	.....	.....	....
179. Accidental burns and scalds (conflagration excepted)	75	25	3	10	2	9	3	2	*2	3	....
180. Accidental mechanical suffocation	9	3	.....	1	.....	1	.....	.....	1	1	....
180A. Overlaying	1	1	.....	.....	.....	.....	.....	.....	.....	.....	....
180B. Asphyxia	8	2	.....	1	.....	1	.....	.....	1	1	....
181. Accidental absorption of irrespirable or poisonous gas	31	21	4	1	1	.....	.....	.....	.....	.....	1
182. Accidental drowning	81	19	6	8	2	2	3	.....	2	3	3
183. Accidental traumatism by firearms	13	3	1	2	.....	.....	.....	1	.....	.....	1
184. Accidental traumatism by cutting or piercing instruments	3	1	1	.....	.....	.....	.....	.....	.....	1	....
185. Accidental traumatism by fall	188	102	15	15	11	5	3	.....	2	.....	1
186. Accidental traumatism in mines and quarries	1	.....	1	.....	.....	.....	.....	.....	.....	.....	....
186A. Coal mines	1	.....	1	.....	.....	.....	.....	.....	.....	.....	....
187. Accidental traumatism by machines	26	8	3	1	2	.....	.....	.....	.....	1	....
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	345	118	38	26	20	28	7	8	6	3	4
188A. Railroad accidents	45	8	3	2	5	5	.....	1	.....	2	1
188B. Street car accidents	19	12	.....	2	1	.....	.....	.....	.....	.....	....
188C. Automobile accidents	229	81	29	17	13	22	6	6	3	.....	1
188D. Aeroplane and balloon accidents	2	1	1	.....	.....	.....	.....	.....	.....	.....	....
188E. Injuries by other vehicles	22	7	2	4	1	1	1	.....	2	.....	1
188F. Other crushing	28	9	3	1	.....	.....	.....	1	1	1	1
189. Injuries by animals (poisoning excepted)	3	2	.....	.....	.....	.....	.....	.....	1	.....	....
192. Starvation (deprivation of food or water)	1	.....	.....	1	.....	.....	.....	.....	.....	.....	....
194. Excessive heat	4	.....	.....	1	.....	1	.....	.....	.....	.....	....
195. Lightning	1	1	.....	.....	.....	.....	.....	.....	.....	.....	....
196. Other accidental electric shocks	13	2	2	2	.....	1	1	.....	.....	.....	2
197-199. Homicides	39	22	4	1	.....	2	.....	.....	1	.....	3
197. Homicide by firearms	7	3	1	.....	.....	.....	.....	.....	.....	.....	3
198. Homicide by cutting or piercing instruments	4	4	.....	.....	.....	.....	.....	.....	.....	.....	....
199. Homicide by other means	28	15	3	1	.....	2	.....	.....	1	.....	....
201. Fracture (cause not specified)	68	1	7	5	15	4	3	5	1	1	1
202. Other external violence (cause specified)	31	5	2	5	.....	4	.....	1	2	1	2

ONTARIO, 1928.—Continued

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
.....	6	6	4	4	3	1	1	7	3	8	2	1	5	3	2	
.....	6	6	4	4	3	1	1	7	3	8	2	1	5	3	2	164
20	30	18	9	16	35	16	16	28	16	14	10	11	8	5	21	
3	4	2	1	4	7	2	2	1	1	.....	.....	2	.....	.....	1	165–174
.....	.....	2	.....	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	165
.....	.....	.....	.....	1	3	1	.....	.....	.....	.....	.....	.....	.....	.....	1	166
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	167
.....	1	.....	1	1	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	168
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	169
2	2	.....	.....	.....	1	1	1	.....	.....	.....	.....	2	.....	.....	.....	170
.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	171
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	172
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	173
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	175
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	176
.....	.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	177
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	178
2	3	.....	.....	1	1	2	.....	1	1	1	.....	.....	.....	1	3	179
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	180
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	180A
1	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	180B
.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	181
3	2	4	1	1	9	1	1	4	1	.....	1	1	2	.....	2	182
.....	.....	1	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	183
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	184
3	3	1	.....	3	3	3	2	2	4	4	.....	1	.....	2	3	185
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	186
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	186A
.....	2	.....	.....	1	.....	1	2	.....	.....	1	1	.....	.....	.....	3	187
7	14	4	2	6	6	5	6	15	6	.....	4	3	4	.....	5	188
5	2	1	1	.....	1	.....	2	1	1	.....	2	.....	2	.....	.....	188A
.....	1	2	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	188B
1	9	1	1	5	3	4	4	12	3	.....	2	2	.....	.....	4	188C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	188D
.....	.....	.....	.....	.....	.....	1	.....	1	1	.....	.....	.....	.....	.....	.....	188E
1	2	.....	.....	1	2	.....	.....	1	.....	.....	.....	1	2	.....	1	188F
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	189
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	192
.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	194
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	195
.....	.....	1	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	196
.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	1	.....	.....	2	197–199
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	197
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	198
.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	1	1	.....	.....	2	199
.....	.....	2	3	.....	1	1	2	2	3	4	3	.....	1	2	1	201
.....	.....	.....	2	.....	1	.....	.....	1	.....	1	.....	2	1	.....	1	202

TABLE 44—CAUSES OF DEATH FOR CITIES—

CAUSES OF DEATH	Total	Toronto	Hamilton	Ottawa	London	Windsor	Brantford	Kitchener	Kingston	Sault Ste. Marie	Peterborough
CLASS XV.—ILL-DEFINED DISEASES											
Total	44	8	5	11	3	.....	2	1	1	1	1
204. Sudden death	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
205. Cause of death not specified or ill-defined	43	8	5	10	3	.....	2	1	1	1	1
205A. Ill-defined	4	.....	1	.....	.....	.....	.....	.....	.....	1	1
205B. Not specified or unknown	6	.....	.....	1	.....	.....	1	.....	1	.....	.....
205C. Heart failure	33	8	4	9	3	.....	1	1	.....	.....	.....

ONTARIO, 1928.—Concluded

Fort William	St. Catharines	Guelph	Stratford	St. Thomas	Port Arthur	Sarnia	Niagara Falls	Chatham	Galt	Belleville	Owen Sound	Oshawa	North Bay	Woodstock	Welland	
.....	1	1	.....	.....	1	.....	1	.....	1	2	.....	2	1	.....	1	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	204
.....	1	1	.....	.....	1	.....	1	.....	1	2	.....	2	1	.....	1	205
.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	205A
.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	1	1	.....	.....	205B
.....	1	.....	.....	.....	.....	.....	1	.....	1	2	.....	1	.....	.....	1	205C

TABLE 44A—CAUSES OF DEATH FOR TOWNS

CAUSES OF DEATH	Total	Brockville	Orillia	Sudbury	Pembroke	Lindsay	Cornwall	Walkerville	Midland	Barrie	Smith's Falls
DEATHS—ALL CAUSES. **Total**	**3,101**	**171**	**135**	**200**	**182**	**115**	**272**	**146**	**111**	**120**	**109**
CLASS I.—EPIDEMIC, ENDEMIC AND INFECTIOUS DISEASES											
Total	428	19	8	42	16	8	54	36	5	12	19
1. Typhoid and paratyphoid fever	16	....	....	3	2	2	....	....	1	....	....
1A. Typhoid fever	16	....	....	3	2	2	....	....	1	....	....
7. Measles	5	....	....	....	....	....	1	2	....	1	....
8. Scarlet fever	6	....	1	....	1	....	2	1	....	....	....
9. Whooping-cough	19	....	....	2	3	....	....	3	....	....	....
10. Diphtheria	23	....	2	1	....	....	6	2	....	1	2
11. Influenza	148	8	2	11	2	1	20	11	....	6	9
11A. Influenza, sole cause	25	1	....	1	....	....	12	....	....	2	....
11B. Influenza, with phthisis	1	....	....	....	....	....	1	....	....	....	....
11C. Influenza, with bronchitis	6	....	....	....	1	....	1	3	....	....	1
11D. Influenza, with pneumonia	67	4	....	5	1	1	3	8	....	1	5
11E. Influenza, with other respiratory diseases	4	....	....	2	....	....	....	....	....	....	....
11F. Influenza, with diseases and accidents of pregnancy and parturition	5	....	....	....	....	....	....	....	....	....	....
11G. Influenza, with other causes	40	3	2	3	....	....	3	....	....	3	3
13. Mumps	1	....	....	....	....	....	....	....	....	....	....
16. Dysentery	8	....	....	5	....	....	....	....	....	....	....
21. Erysipelas	6	1	....	....	....	....	2	....	....	1	1
22. Acute anterior poliomyelitis	5	....	....	....	2	....	....	....	....	....	....
23. Lethargic encephalitis	3	....	....	....	....	1	....	....	....	....	1
24. Meningococcus meningitis	7	....	....	1	....	....	....	1	1	....	....
29. Tetanus	2	....	....	1	....	....	....	....	....	....	....
31-37. Tuberculosis	157	10	1	15	5	4	18	14	2	3	5
31. Tuberculosis of the respiratory system	128	10	1	7	3	4	13	14	2	2	5
32. Tuberculosis of the meninges and central nervous system	5	....	....	1	....	....	....	....	....	....	....
33. Tuberculosis of the intestines and peritoneum	10	....	....	2	2	....	2	....	....	1	....
34. Tuberculosis of the vertebral column	1	....	....	....	....	....	....	....	....	....	....
36. Tuberculosis of other organs	6	....	....	2	....	....	....	....	....	....	....
36B. Tuberculosis of the bones (vertebral column excepted)	2	....	....	1	....	....	....	....	....	....	....
36C. Tuberculosis of the lymphatic system (mesenteric and retroperitoneal glands excepted)	2	....	....	1	....	....	....	....	....	....	....
36D. Tuberculosis of the genito-urinary system	2	....	....	....	....	....	....	....	....	....	....
37. Disseminated tuberculosis	7	....	....	3	....	....	3	....	....	....	....
37A. Disseminated tuberculosis, acute	5	....	....	1	....	....	3	....	....	....	....
37B. Disseminated tuberculosis, chronic or unstated	2	....	....	2	....	....	....	....	....	....	....
38. Syphilis	5	....	1	....	....	....	....	....	....	....	....
40. Gonococcus infection	1	....	....	....	....	....	....	1	....	....	....
41. Purulent infection, septicaemia	16	....	1	3	1	....	5	1	1	....	1
CLASS II.—GENERAL DISEASES NOT INCLUDED IN CLASS I.											
Total	349	18	23	13	29	12	29	12	14	18	22
43-49. Cancer	235	11	15	5	19	8	19	9	7	16	13
43. Cancer of the buccal cavity	8	1	....	....	1	....	1	....	....	....	1
44. Cancer of the stomach and liver	91	5	5	3	10	3	7	3	2	6	6
45. Cancer of the peritoneum, intestines and rectum	46	1	5	....	2	....	8	3	1	4	2
46. Cancer of the female genital organs	32	1	1	....	2	2	2	....	3	1	....
47. Cancer of the breast	23	1	1	....	1	1	1	1	....	2	....
48. Cancer of the skin	3	....	....	....	1	....	....	1	....	....	1
49. Cancer of other or unspecified organs	32	2	3	2	2	2	....	1	1	3	3
49B. Cancer of circulatory system	2	....	....	....	....	....	....	....	....	....	....
49C. Cancer of respiratory system	6	....	....	....	1	....	....	1	....	....	1
49D. Cancer of digestive system	3	....	1	....	....	....	....	....	....	1	....
49E. Cancer of genito-urinary organs	13	2	2	2	....	1	....	....	....	....	2
49F. Cancer of bones and joints	1	....	....	....	....	1	....	....	....	....	....
49G. Cancer of other specified organs	6	....	....	....	1	....	....	....	1	1	....
49I. Cancer unspecified	1	....	....	....	....	....	....	....	....	1	....
50. Benign tumours and tumours not returned as malignant (tumours of female genital organs excepted)	5	2	....	....	1	....	....	....	....	....	2
51. Acute rheumatic fever	11	1	....	....	1	1	....	....	1	....	....
52. Chronic rheumatism, osteo-arthritis, gout	2	....	1	....	....	....	....	....	....	....	....

OF 5,000 POPULATION AND OVER—ONTARIO, 1928

Trenton	Waterloo	Collingwood	Ford City	Hawkesbury	Preston	Kenora	Cobourg	Eastview	Ingersoll	Brampton	Dundas	Fort Frances	Leamington	Mimico	New Toronto	Port Colborne	Renfrew	Timmins	Whitby	
73	48	77	67	77	53	72	113	75	89	80	62	67	54	66	27	52	79	178	131	
9	4	4	17	9	3	8	23	8	11	16	61	8	7	9	4	9	6	33	15	
....	....	....	1	....	....	....	1	1	....	....	....	....	....	1	....	....	....	4	.....	1
....	....	....	1	....	....	....	1	1	....	....	....	....	....	1	....	....	....	4	.....	1A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	.....	.....	7
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	.....	.....	8
3	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	1	1	2	.....	9
....	....	....	5	....	1	....	1	....	1	1	....	....	....	....	....	....	....	.....	.....	10
....	....	....	3	1	1	....	15	5	7	11	1	3	2	6	2	3	1	15	2	11
....	....	....	1	....	....	....	1	....	1	3	....	....	....	1	....	....	1	1	.....	11A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	11B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	11C
....	....	....	1	....	....	....	10	3	2	3	....	2	1	4	1	2	....	8	2	11D
....	....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	.....	.....	11E
....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	3	.....	11F
....	....	....	1	....	1	....	2	2	4	5	....	1	1	1	1	1	....	3	.....	11G
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	13
....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	1	.....	16
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	.....	.....	21
....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	.....	1	22
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	.....	.....	23
....	....	....	....	....	....	....	....	....	....	....	1	1	....	....	....	1	....	1	.....	24
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	.....	29
4	2	4	4	7	....	5	6	1	2	3	4	4	3	2	1	3	4	9	12	31–37
2	2	2	4	7	....	5	5	1	2	3	2	3	3	2	....	1	4	8	11	31
....	....	....	....	....	....	....	....	....	....	....	2	1	....	....	....	1	....	.....	.....	32
....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	33
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	.....	.....	34
2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	.....	.....	36
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	36B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	.....	.....	36C
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	.....	.....	36D
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	37
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	37A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	37B
1	....	....	2	....	....	....	....	....	1	....	....	....	....	....	....	....	....	.....	.....	38
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	40
1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	41
8	8	11	6	7	9	11	7	6	14	10	13	8	6	7	1	7	10	7	3	
6	6	9	4	4	7	8	7	3	8	7	11	5	4	5	1	4	9	3	2	43–49
....	....	....	....	....	....	....	1	....	....	....	1	1	....	....	....	....	....	1	.....	43
3	3	2	3	3	4	3	2	1	1	1	3	3	1	1	1	3	2	.....	1	44
1	2	3	....	....	....	1	2	1	1	2	1	....	....	1	....	....	3	1	1	45
1	....	3	....	....	1	1	2	1	4	....	4	....	....	1	....	1	....	1	.....	46
....	1	....	1	....	1	1	....	....	1	4	....	....	3	2	....	....	1	.....	.....	47
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	48
1	....	1	....	1	1	2	....	....	1	....	2	1	....	....	....	....	3	.....	.....	49
....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	.....	.....	49B
....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	1	.....	.....	49C
....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	49D
....	....	....	....	....	....	1	....	....	1	....	1	....	....	....	....	....	1	.....	.....	49E
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	49F
1	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	.....	.....	49G
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	491
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	50
....	....	....	2	2	....	....	....	....	....	....	....	1	....	2	....	....	....	.....	.....	51
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	.....	52

TABLE 44A—CAUSES OF DEATH FOR TOWNS

CAUSES OF DEATH	Total	Brockville	Orillia	Sudbury	Pembroke	Lindsay	Cornwall	Walkerville	Midland	Barrie	Smith's Falls
56. Rickets	2			1				1			
57. Diabetes mellitus	30	1	2	2	4	1	6		3	2	1
58. Anaemia, chlorosis	15		2	2				1			3
58A. Pernicious anaemia	14		2	2				1			3
58B. Other anaemias and chlorosis	1										
59. Diseases of the pituitary gland	1										1
60. Diseases of the thyroid gland	19	1	1		2		3		3		1
60A. Exophthalmic goiter	14	1			1		3		3		
60B. Other diseases of the thyroid gland	5		1		1						1
62. Diseases of the thymus	5			2							
64. Diseases of the spleen	2				1						
65. Leukaemia, lymphadenoma	7	1				1	1				1
65A. Leukaemia	4						1				1
65B. Lymphadenoma (Hodgkin's disease)	3	1				1					
66. Alcoholism	9		1		1			1			
66B. Acute alcoholism	8		1		1			1			
66C. Chronic alcoholism	1										
69. Other general diseases	6	1	1	1		1					
69A. Diabetes insipidus	1										
69B. Haemophilia	2		1								
69C. Purpura haemorrhagica	3	1		1		1					
CLASS III.—DISEASES OF THE NERVOUS SYSTEM AND OF ORGANS OF SPECIAL SENSE.											
Total	231	14	13	11	8	9	12	9	12	7	6
70. Encephalitis	4		1							1	
70B. Encephalitis	4		1							1	
71. Meningitis	13			3			2	1			
71A. Simple meningitis	13			3			2	1			
72. Tabes dorsalis (locomotor ataxia)	1	1									
73. Other diseases of the spinal cord	14	1	3		2			1	1	1	1
74. Cerebral haemorrhage, apoplexy	97	5	3	4	4	3	8	2	9	3	3
74A. Apoplexy	45	1	3	2	2	2	3	2	4	3	2
74B. Cerebral haemorrhage	46	4		1	2	1	5		5		1
74C. Cerebral thrombosis and embolism	6			1							
75. Paralysis without specified cause	28	5	2	1		5			2	1	1
75A. Hemiplegia	23	5	2	1		4			1	1	1
75B. Others under this title	5					1			1		
76. General paralysis of the insane	6							1		1	
77. Other forms of mental alienation	21						1	2			
78. Epilepsy	9				1			1			
79. Convulsions (non-puerperal, 5 years or over)	1			1							
80. Infantile convulsions (under 5 years of age)	8	1			1						
81. Chorea	2		1								
83. Softening of the brain	7		1								
84. Other diseases of the nervous system	12		2				1				
85. Diseases of the eye and annexa	1	1									
86. Diseases of the ear and of the mastoid process	7			2		1		1			1
86A. Diseases of the ear	4					1		1			1
86B. Diseases of the mastoid process	3			2							
CLASS IV.—DISEASES OF THE CIRCULATORY SYSTEM.											
Total	602	47	27	24	34	28	36	26	27	23	18
87-90. Diseases of the heart	409	34	16	16	29	16	25	18	16	18	12
87. Pericarditis	1										
88. Endocarditis and myocarditis (acute)	17		1	2			1	2	1	1	
88A. Acute endocarditis	12		1	2			1	2			
88B. Acute myocarditis	5								1	1	
89. Angina pectoris	43	2	2	2	4		3	3	3	2	
90. Other diseases of the heart	348	32	13	12	25	16	21	13	12	15	12
90A. Valvular disease	71	13	1	1	3	2	3	4	3	2	5
90B. Fatty degeneration of the heart	2						1				
90D. Chronic endocarditis	63	2	3	7	6	1	3	2	5	1	4
90E. Chronic myocarditis	167	16	8	4	15	8	11	6	3	10	2
90F. Others under this title	45	1	1		1	5	3	1	1	2	1
91. Diseases of the arteries	181	13	9	8	5	9	11	7	11	5	6
91A. Aneurysm	2				1			1			
91B. Arteriosclerosis	179	13	9	8	4	9	11	6	11	5	6
92. Embolism and thrombosis (not cerebral)	7					2		1			
93. Diseases of the veins (varices, haemorrhoids, phlebitis, etc.)	5		2			1					

OF 5,000 POPULATION AND OVER—ONTARIO, 1928.—Continued

Trenton	Waterloo	Collingwood	Ford City	Hawkesbury	Preston	Kenora	Cobourg	Eastview	Ingersoll	Brampton	Dundas	Fort Frances	Leamington	Mimico	New Toronto	Port Colborne	Renfrew	Timmins	Whitby	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	56
....	1	1	....	1	....	1	....	1	1	....	....	....	....	....	....	1	....	1	.....	57
....	1	....	....	....	1	....	....	....	3	1	1	....	....	....	....	....	....	....	.....	58
....	1	....	....	....	1	....	....	....	3	1	....	....	....	....	....	....	....	....	.....	58A
....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	58B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	59
....	....	....	....	....	....	....	....	1	2	1	....	....	2	....	....	....	1	....	1	60
....	....	....	....	....	....	....	....	....	2	....	....	....	2	....	....	....	1	....	1	60A
....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	.....	60B
1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	.....	62
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	64
1	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	.....	65
....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	.....	65A
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	65B
....	....	....	....	....	1	1	....	....	....	....	1	1	....	....	....	1	....	1	.....	66
....	....	....	....	....	1	1	....	....	....	....	1	1	....	....	....	....	....	1	.....	66B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	.....	66C
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	.....	69
....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	.....	69A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	69B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	69C
9	3	3	2	4	8	2	11	4	5	7	12	4	5	10	....	2	9	5	25	
....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	70
....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	70B
....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	....	....	3	1	.....	71
....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	....	....	3	1	.....	71A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	72
1	....	....	....	....	....	....	....	....	....	....	....	....	1	1	....	1	....	....	.....	73
3	2	2	....	3	4	....	8	1	1	4	7	3	3	1	....	....	4	3	4	74
....	....	2	....	....	2	....	2	1	....	2	5	....	1	1	....	....	....	2	3	74A
3	2	....	....	3	2	....	5	....	1	1	2	2	1	....	....	....	4	....	1	74B
....	....	....	....	....	....	....	1	....	....	1	....	1	1	....	....	....	....	1	.....	74C
2	....	....	....	....	1	....	....	1	2	....	....	....	1	1	....	....	1	....	2	75
1	....	....	....	....	1	....	....	1	2	....	....	....	....	1	....	....	1	....	1	75A
1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	1	75B
....	....	....	....	....	....	....	....	....	....	1	....	....	....	1	....	....	....	....	2	76
....	....	....	1	....	....	....	1	....	....	....	....	....	....	2	....	....	....	....	14	77
....	....	....	....	....	....	....	1	....	....	....	....	....	....	4	....	....	....	....	2	78
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	79
1	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	1	1	1	.....	80
....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	81
....	....	....	....	....	....	....	1	....	....	2	3	....	....	....	....	....	....	....	.....	83
2	....	....	1	....	....	1	....	1	1	....	2	1	....	....	....	....	....	....	.....	84
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	85
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	86
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	86A
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	86B
21	16	23	9	9	10	12	37	12	24	14	10	9	16	14	7	6	19	8	36	
14	11	15	7	4	7	9	29	8	16	8	8	3	9	7	5	3	15	7	24	87–90
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	87
....	2	1	1	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	3	88
....	2	1	1	....	....	....	....	....	1	....	....	....	....	....	1	....	....	....	.....	88A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	3	88B
2	1	....	1	....	....	4	2	....	3	1	2	....	1	1	....	1	2	....	1	89
12	8	14	5	4	7	5	27	8	12	7	6	3	8	6	4	2	13	6	20	90
4	2	2	....	....	....	1	8	1	1	4	....	....	1	....	1	....	5	2	2	90A
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	.....	90B
....	....	8	4	1	....	....	3	2	....	2	....	....	3	2	1	....	2	....	1	90D
4	6	1	....	2	6	3	9	2	11	1	3	1	4	2	2	1	5	4	17	90E
4	....	3	1	1	1	1	6	3	....	....	3	2	....	2	....	1	1	....	.....	90F
7	5	8	2	5	2	3	7	4	7	6	2	5	6	7	2	3	3	1	12	91
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	91A
7	5	8	2	5	2	3	7	4	7	6	2	5	6	7	2	3	3	1	12	91B
....	....	....	....	....	....	....	1	....	....	....	....	1	1	....	....	....	1	....	.....	92
....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	.....	93

TABLE 44A—CAUSES OF DEATH FOR TOWNS

CAUSES OF DEATH	Total	Brockville	Orillia	Sudbury	Pembroke	Lindsay	Cornwall	Walkerville	Midland	Barrie	Smith's Falls
CLASS V.—DISEASES OF THE RESPIRATORY SYSTEM.											
Total	282	7	15	11	13	16	32	17	12	7	10
97. Diseases of the nasal fossae and their annexa	3	....	....	....	....	1	....	....	....	....	....
98. Diseases of the larynx	1	....	....	....	....	....	1	....	....	....	....
98c. Croup	1	....	....	....	....	....	1	....	....	....	....
99. Bronchitis	13	....	....	1	1	2	2	....	1	1	1
99A. Bronchitis, acute	5	....	....	....	....	1	....	....	....	1	....
99B. Bronchitis, chronic	5	....	....	....	....	1	2	....	1	....	....
99C. Bronchitis, not otherwise defined, under 5 years of age	1	....	....	....	....	....	....	....	....	....	1
99D. Bronchitis, not otherwise defined, 5 years or over	2	....	....	1	1	....	....	....	....	....	....
100. Broncho-pneumonia (including capillary bronchitis)	79	1	5	1	5	2	13	5	1	....	2
100A. Broncho-pneumonia	76	1	5	1	5	2	12	5	1	....	2
100B. Capillary bronchitis	3	....	....	....	....	....	1	....	....	....	....
101. Pneumonia	152	5	8	8	4	10	10	10	8	6	4
101A. Pneumonia, lobar	68	1	5	5	....	4	8	7	3	2	2
101B. Pneumonia, not otherwise defined	84	4	3	3	4	6	2	3	5	4	2
102. Pleurisy	7	1	....	....	....	1	1	....	....	....	....
103. Congestion and haemorrhagic infarct of the lung	11	....	1	....	1	....	2	2	1	....	1
105. Asthma	6	....	....	....	....	....	3	....	....	....	1
106. Pulmonary emphysema	1	....	....	....	....	....	....	....	....	....	....
107. Other diseases of the respiratory system (tuberculosis excepted	9	....	1	1	2	....	....	....	1	....	1
107A. Chronic interstitial pneumonia including occupational diseases of the lungs	1	....	....	....	....	....	....	....	....	....	....
107C. Others under this title	8	....	1	1	2	....	....	....	1	....	1
CLASS VI.—DISEASES OF THE DIGESTIVE SYSTEM.											
Total	321	11	19	36	28	13	46	14	10	15	11
108. Diseases of the mouth and annexa	3	....	....	....	1	....	1	1	....	....	....
109. Diseases of the pharynx and tonsils (including adenoid vegetations)	17	....	2	2	3	....	....	1	1	2	....
109B. Pharynx and tonsils	17	....	2	2	3	....	....	1	1	2	....
111. Ulcer of the stomach and duodenum	17	....	3	1	1	3	1	1	1	3	1
111A. Ulcer of the stomach	10	....	2	1	1	1	1	1	1	1	....
111B. Ulcer of the duodenum	7	....	1	....	....	2	....	....	....	2	1
112. Other diseases of the stomach (cancer excepted)	20	....	1	1	1	....	1	1	1	....	3
113. Diarrhoea and enteritis (under 2 years of age)	99	2	1	22	3	....	22	1	1	1	1
114. Diarrhoea and enteritis (2 years or over)	24	....	3	3	1	....	3	....	....	2	....
117. Appendicitis and typhlitis	60	5	4	3	10	4	9	5	2	2	3
118. Hernia, intestinal obstruction	32	1	3	1	2	3	5	2	2	3	....
118A. Hernia	12	1	1	....	....	1	2	2	....	....	....
118B. Intestinal obstruction	20	....	2	1	2	2	3	....	2	3	....
119. Other diseases of the intestines	7	1	1	1	1	1	1	....	....	....	....
122. Cirrhosis of the liver	6	....	....	....	1	....	1	....	....	....	....
122B. Not specified as alcoholic	6	....	....	....	1	....	1	....	....	....	....
123. Biliary calculi	11	....	1	1	1	....	1	....	1	....	2
124. Other diseases of the liver	16	1	....	....	1	2	1	2	1	2	....
125. Diseases of the pancreas	3	1	....	1	1	....	....	....	....	....	....
126. Peritonitis without specified cause	6	....	....	....	1	....	....	....	....	....	1
CLASS VII.—NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.											
Total	190	14	11	8	13	17	14	6	3	14	5
128. Acute nephritis (including unspecified, under 10 years of age)	10	....	1	....	....	1	1	....	....	....	....
129. Chronic nephritis (Bright's disease)	119	10	6	4	9	11	8	3	1	10	4
131. Other diseases of the kidneys and annexa	13	1	....	4	1	1	1	2	....	2	....
132. Calculi of the urinary passages	3	1	....	....	....	....	1	....	....	....	....
133. Diseases of the bladder	8	....	1	....	....	1	1	....	....	....	....
134. Diseases of the urethra, urinary abscess, etc.	1	....	1	....	....	....	....	....	....	....	....
134A. Stricture of the urethra	1	....	1	....	....	....	....	....	....	....	....
135. Diseases of the prostate	26	2	1	....	3	2	1	....	2	1	1
136. Non-venereal diseases of the male genital organs	1	....	....	....	....	....	....	....	....	....	....
137. Cysts and other benign tumours of the ovary	3	....	....	....	....	1	....	....	....	....	....
138. Salpingitis and pelvic abscess	1	....	....	....	....	....	....	1	....	....	....
139. Benign tumours of the uterus	1	....	....	....	....	....	....	....	....	....	....
141. Other diseases of the female genital organs	5	....	1	....	....	....	1	....	....	1	....

OF 5,000 POPULATION AND OVER—ONTARIO, 1928.—Continued

Trenton	Waterloo	Collingwood	Ford City	Hawkesbury	Preston	Kenora	Cobourg	Eastview	Ingersoll	Brampton	Dundas	Fort Frances	Leamington	Mimico	New Toronto	Port Colborne	Renfrew	Timmins	Whitby	
2	4	5	12	10	5	7	12	8	7	8	8	7	1	6	1	9	3	11	16	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	1	.....	97
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	98
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	98C
....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	....	....	.....	1	99
....	....	....	....	....	....	....	1	....	....	....	....	....	....	2	....	....	....	.....	.....	99A
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	99B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	99C
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	99D
....	1	3	1	5	1	....	6	2	2	....	1	....	....	3	....	3	1	4	11	100
....	1	2	1	5	1	....	6	1	2	....	1	....	....	3	....	3	1	4	11	100A
....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	.....	.....	100B
2	2	2	11	4	3	7	4	6	4	8	7	5	1	1	1	5	2	3	1	101
....	1	2	1	....	1	....	4	2	2	2	6	4	1	....	....	1	2	1	1	101A
2	1	....	10	4	2	7	....	4	2	6	1	1	....	1	1	4	....	2	.....	101B
....	....	....	....	....	....	....	....	....	1	....	....	1	....	....	....	....	....	2	.....	102
....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	103
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	.....	1	105
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	106
....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	1	.....	107
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	107A
....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	....	....	.....	.....	107C
7	3	4	4	15	4	7	7	17	6	3	3	6	2	....	3	2	6	19	.....	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	108
....	....	....	....	....	2	....	....	....	2	....	....	....	....	....	....	....	1	1	.....	109
....	....	....	....	....	2	....	....	....	2	....	....	....	....	....	....	....	1	1	.....	109B
1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	.....	111
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	.....	111A
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	111B
1	1	1	1	1	....	....	....	1	....	1	....	1	1	....	1	1	....	.....	.....	112
1	....	....	1	5	....	....	....	15	....	....	1	3	....	....	2	1	3	13	.....	113
2	....	2	2	1	....	1	1	1	....	....	....	....	....	....	....	....	....	2	.....	114
....	....	....	....	2	....	1	3	....	2	1	....	1	....	....	....	....	1	2	.....	117
....	....	....	....	3	1	1	2	....	1	....	1	....	....	....	....	....	1	.....	.....	118
....	....	....	....	2	....	1	2	....	....	....	....	....	....	....	....	....	....	.....	.....	118A
....	....	....	....	1	1	....	....	....	1	....	1	....	....	....	....	....	1	.....	.....	118B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	119
1	1	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	.....	.....	122
1	1	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	.....	.....	122B
1	....	....	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....	.....	.....	123
....	1	....	....	....	1	2	1	....	....	....	....	....	1	....	....	....	....	.....	.....	124
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	125
....	....	....	....	2	....	1	....	....	....	....	1	....	....	....	....	....	....	.....	.....	126
5	4	11	3	2	5	1	4	....	4	3	4	7	7	1	1	3	9	4	7	
....	1	2	....	....	1	....	....	....	....	1	....	1	....	....	....	....	1	.....	.....	128
4	2	4	3	1	3	1	....	....	3	2	1	6	7	1	....	3	3	3	5	129
....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	.....	.....	131
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	132
1	....	....	....	1	....	....	1	....	....	....	2	....	....	....	....	....	....	.....	.....	133
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	134
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	134A
....	....	4	....	....	1	....	2	....	....	....	1	....	....	....	....	....	3	.....	2	135
....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	136
....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	.....	137
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	138
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	.....	.....	139
....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	.....	.....	141

TABLE 44A—CAUSES OF DEATH FOR TOWNS

CAUSES OF DEATH	Total	Brockville	Orillia	Sudbury	Pembroke	Lindsay	Cornwall	Walkerville	Midland	Barrie	Smith's Falls
CLASS VIII.—THE PUERPERAL STATE.											
Total	29	2	3	5	5	....	1	1	....	1	2
143. Accidents of pregnancy	2	....	1	....	....	....	....	1	....	....	....
143B. Ectopic gestation	1	....	1	....	....	....	....	....	....	....	....
143C. Others under this title	1	....	....	....	....	....	....	1	....	....	....
144. Puerperal haemorrhage	3	1	....	1	....	....	....	....	....	....	....
145. Other accidents of labour	3	....	1	....	1	....	....	....	....	....	....
145A. Caesarean section	1	....	1	....	....	....	....	....	....	....	....
145B. Difficult labour	1	....	....	....	....	....	....	....	....	....	....
145D. Uncontrollable vomiting	1	....	....	....	1	....	....	....	....	....	....
146. Puerperal septicaemia	10	1	....	1	1	....	....	....	....	1	2
147. Puerperal phlegmasia alba dolens, puerperal embolism, sudden death in puerperium	1	....	....	....	....	....	....	....	....	....	....
148. Puerperal albuminuria and convulsions	8	....	....	3	3	....	1	....	....	....	....
149. Following childbirth (not otherwise defined)	2	....	1	....	....	....	....	....	....	....	....
CLASS IX.—DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.											
Total	26	5	....	2	2	1	1	....	....	....	2
151. Gangrene	14	1	....	....	2	1	1	....	....	....	2
152. Furuncle	1	1	....	....	....	....	....	....	....	....	....
153. Acute abscess	5	2	....	2	....	....	....	....	....	....	....
154. Other diseases of the skin and annexa	6	1	....	....	....	....	....	....	....	....	....
CLASS X.—DISEASES OF THE BONES AND OF THE ORGANS of LOCOMOTION.											
Total	10	1	....	2	1	....	1	1	....	1	....
155. Diseases of the bones (mastoid and tuberculosis excepted)	8	1	....	1	1	....	1	1	....	1	....
156. Diseases of the joints (tuberculosis and rheumatism excepted)	2	....	....	1	....	....	....	....	....	....	....
CLASS XI.—MALFORMATIONS.											
Total	33	....	1	1	1	....	3	3	4	2	2
159. Congenital malformations (stillbirths not included)	33	....	1	1	1	....	3	3	4	2	2
159A. Congenital hydrocephalus	1	....	1	....	....	....	....	....	....	....	....
159B. Congenital malformations of the heart	20	....	....	1	1	....	1	1	3	2	1
159C. Others under this title	12	....	....	....	....	....	2	2	1	....	1
CLASS XII.—DISEASES OF EARLY INFANCY.											
Total	259	13	4	21	17	6	25	13	14	6	5
160. Congenital debility, icterus and sclerema	35	....	....	5	3	1	4	....	2	1	....
161. Premature birth, injury at birth	201	13	4	13	13	5	19	12	9	4	5
161A. Premature birth	176	10	4	11	12	5	16	11	9	3	4
161B. Injury at birth	25	3	....	2	1	....	3	1	....	1	1
162. Other diseases peculiar to early infancy	23	....	....	3	1	....	2	1	3	1	....
162A. Specified diseases	23	....	....	3	1	....	2	1	3	1	....
CLASS XIII.—OLD AGE.											
Total	69	....	4	1	1	2	4	....	....	5	1
164. Senility	69	....	4	1	1	2	4	....	....	5	1

OF 5,000 AND POPULATION AND OVER—ONTARIO, 1928.—Continued

Trenton	Waterloo	Collingwood	Ford City	Hawkesbury	Preston	Kenora	Cobourg	Eastview	Ingersoll	Brampton	Dundas	Fort Frances	Leamingtan	Mimico	New Toronto	Port Colborne	Renfrew	Timmins	Whitby	
....	....	....	1	....	....	1	....	....	2	1	....	....	....	1	....	1	....	2	.....	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	143
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	143B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	143C
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	144
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	.....	.....	145
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	145A
....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	.....	.....	145B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	145D
....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	1	....	1	.....	146
....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	.....	.....	147
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	.....	148
....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	149
1	....	....	....	....	....	....	2	....	....	1	....	....	....	6	....	....	....	1	2	
....	....	....	....	....	....	....	1	....	....	1	....	....	....	4	....	....	....	.....	1	151
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	152
....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	.....	.....	153
1	....	....	....	....	....	....	1	....	....	....	....	....	....	1	....	....	....	1	1	154
1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	.....	
1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	.....	.....	155
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	156
2	1	....	....	....	....	2	1	1	....	....	....	3	....	1	1	2	1	1	.....	
2	1	....	....	....	....	2	1	1	....	....	....	3	....	1	1	2	1	1	.....	159
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	159A
....	1	....	....	....	....	1	1	....	....	....	....	3	....	....	....	2	1	1	.....	159B
2	....	....	....	....	....	1	....	1	....	....	....	....	....	1	1	....	....	.....	.....	159C
4	1	5	10	13	5	7	4	14	7	7	1	4	2	5	5	3	7	30	1	
1	....	....	....	4	....	1	1	2	2	....	....	....	....	....	1	1	....	6	.....	160
3	1	5	8	7	5	4	3	9	3	7	1	4	2	5	4	2	6	24	1	161
3	1	4	7	3	5	4	3	8	3	6	1	4	2	5	2	1	6	22	1	161A
....	....	1	1	4	....	....	....	1	....	1	....	....	....	....	2	1	....	2	.....	161B
....	....	....	2	2	....	2	....	3	2	....	....	....	....	....	....	....	1	.....	.....	162
....	....	....	2	2	....	2	....	3	2	....	....	....	....	....	....	....	1	.....	.....	162A
2	2	8	....	1	1	....	....	4	2	3	2	1	4	2	1	....	....	.....	18	
2	2	8	....	1	1	....	....	4	2	3	2	1	4	2	1	....	....	.....	18	164

TABLE 44A—CAUSES OF DEATH FOR TOWNS

CAUSES OF DEATH	Total	Brockville	Orillia	Sudbury	Pembroke	Lindsay	Cornwall	Walkerville	Midland	Barrie	Smith's Falls
CLASS XIV.—EXTERNAL CAUSES.											
Total	260	20	5	23	14	3	11	8	10	8	6
165-174. Suicides	12	2	....	3	....	....	....	....	....	....	....
166. Suicide by corrosive substances	2	....	....	1	....	....	....	....	....	....	....
168. Suicide by hanging or strangulation	5	1	....	1	....	....	....	....	....	....	....
169. Suicide by drowning	2	....	....	....	....	....	....	....	....	....	....
170. Suicide by firearms	1	....	....	....	....	....	....	....	....	....	....
171. Suicide by cutting or piercing instruments	2	1	....	1	....	....	....	....	....	....	....
175. Poisoning by food	2	....	....	....	1	....	....	....	....	....	1
177. Other acute accidental poisonings (gas excepted)	3	....	....	....	....	....	....	....	....	....	....
178. Conflagration	1	....	....	....	....	....	....	....	....	....	....
179. Accidental burns and scalds (conflagration excepted)	13	2	....	1	....	....	2	....	....	....	....
181. Accidental absorption of irrespirable or poisonous gas	3	....	....	....	....	....	....	....	1	....	1
182. Accidental drowning	33	3	....	....	4	....	1	....	5	....	1
183. Accidental traumatism by firearms	4	....	....	1	1	....	....	....	1	....	....
184. Accidental traumatism by cutting or piercing instruments	1	....	....	....	....	....	....	....	....	....	....
185. Accidental traumatism by fall	28	3	2	2	1	....	3	2	1	1	....
186. Accidental traumatism in mines and quarries	46	....	....	....	....	....	....	....	....	....	....
186B. Other mines	46	....	....	....	....	....	....	....	....	....	....
187. Accidental traumatism by machines	3	....	....	1	1	....	....	....	....	....	....
188. Accidental traumatism by other crushing (vehicles, railways, landslides, etc.)	68	6	3	11	3	2	4	4	1	6	1
188A. Railroad accidents	12	....	....	6	....	....	....	....	....	1	....
188C. Automobile accidents	46	6	2	1	3	2	4	4	1	5	1
188E. Injuries by other vehicles	1	....	....	1	....	....	....	....	....	....	....
188F. Other crushing	9	....	1	3	....	....	....	....	....	....	....
189. Injuries by animals (poisoning excepted)	1	....	....	....	....	....	....	....	....	....	1
193. Excessive cold	3	....	....	....	1	....	....	....	....	....	....
195. Lightning	1	....	....	1	....	....	....	....	....	....	....
196. Other accidental electric shocks	5	....	....	2	1	....	....	....	....	....	....
197–199. Homicides	2	....	....	....	....	....	....	....	....	....	....
199. Homicide by other means	2	....	....	....	....	....	....	....	....	....	....
201. Fracture (cause not specified)	22	3	....	....	1	1	1	1	1	1	1
202. Other external violence (cause specified)	9	1	....	1	....	....	....	1	....	....	....
CLASS XV.—ILL-DEFINED DISEASES.											
Total	12	....	2	....	....	....	3	....	....	1	....
204. Sudden death	1	....	....	....	....	....	1	....	....	....	....
205. Cause of death not specified or ill-defined	11	....	2	....	....	....	2	....	....	1	....
205B. Not specified or unknown	2	....	....	....	....	....	....	....	....	....	....
205C. Heart failure	9	....	2	....	....	....	2	....	....	1	....

OF 5,000 POPULATION AND OVER—ONTARIO, 1928.—Concluded

Trenton	Waterloo	Collingwood	Ford City	Hawkesbury	Preston	Kenora	Cobourg	Eastview	Ingersoll	Brampton	Dundas	Fort Frances	Leamington	Mimico	New Toronto	Port Colborne	Renfrew	Timmins	Whitby	
2	2	3	3	7	3	14	5	1	6	6	3	9	4	4	3	8	8	53	8	
....	....	1	1	....	1	....	....	....	....	....	....	....	....	2	....	....	....	.....	2	165–174
....	....	....	....	....	1	....	....	....	....	....	....	....	....	1	....	....	....	.....	1	166
....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	.....	1	168
....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	169
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	170
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	171
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	175
....	....	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	177
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	178
1	....	....	....	....	....	1	....	1	....	1	....	....	....	....	....	....	1	3	.....	179
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	181
....	1	....	1	1	....	5	....	....	....	....	....	4	2	....	1	2	....	.....	2	182
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	.....	183
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	.....	184
....	1	1	....	....	....	....	1	....	....	....	1	....	1	1	1	2	3	1	.....	185
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	46	.....	186
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	46	.....	186B
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	.....	.....	187
....	....	....	....	2	1	6	2	....	4	3	....	4	1	1	1	....	1	1	.....	188
....	....	....	....	....	....	2	....	....	1	1	....	....	....	....	....	....	1	.....	.....	188A
....	....	....	....	2	1	2	2	....	3	2	....	2	1	1	1	....	....	.....	.....	188C
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	188E
....	....	....	....	....	....	2	....	....	....	....	....	2	....	....	....	....	....	1	.....	188F
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	189
1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	.....	.....	193
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	195
....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	1	196
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	1	197–199
....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	.....	1	199
....	....	1	....	1	....	2	1	....	2	....	2	....	....	....	....	2	....	.....	1	201
....	....	....	....	....	1	....	1	....	....	1	....	1	....	....	....	1	....	1	.....	202
....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	1	3	.....	
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	.....	.....	204
....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	1	3	.....	205
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	.....	205B
....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	2	.....	205C

TABLE 45—DEATHS FROM CERTAIN CAUSES IN TOWNS OF 1,000 POPULATION AND UNDER 5,000—ONTARIO, 1928

| | CAUSES OF DEATH | Total | Blind River | Thessalon | Paris | Chesley | Kincardine | Southampton | Walkerton | Wiarton | Cochrane | Iroquois Falls | Orangeville | Bowmanville | Port Hope | Aylmer | Amherstburg | Essex | Kingsville | Riverside | Sandwich | Tilbury | Alexandria | Prescott | Durham | Hanover | Meaford | Dunnville | Burlington | Georgetown | Milton | Oakville | Deseronto | Clinton | Goderich | Seaforth | Wingham | Dryden | Keewatin | Sioux Lookout | Blenheim | Dresden | Ridgetown | Wallaceburg | Forest | Petrolia | Almonte | Carleton Place | Perth | Gananoque | Napanee | Merriton | Niagara | Grimsby | Parkhill | Strathroy | Bracebridge | Gravenhurst | Huntsville | Mattawa | Sturgeon Falls | Simcoe | Campbellford | Uxbridge | Tillsonburg | Parry Sound | Listowell | Mitchell | St. Marys | Vankleek Hill | Picton | Rainy River | Arnprior | Rockland | Alliston | Penetanguishene | Capreol | Chelmsford | Copper Cliff | Cobalt | Haileybury | New Liskeard | Bespeler | Elmira | Bridgeburg | Thorold | Hamilton | Mount Forest | Fulmerston | Aurora | Newmarket | Weston | Int. List No. |
|---|---|---

DEPARTMENT OF HEALTH

Fourth Annual Report

OF THE

Department of Health

Ontario, Canada

FOR THE YEAR

1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO
SESSIONAL PAPER, No. 14, 1929

ONTARIO

TORONTO:
Printed and Published by the Printer to the King's Most Excellent Majesty
1929

PRODUCED BY
The United Press
LIMITED
TORONTO
CANADA

To His Honour William Donald Ross, Esq.,
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

I herewith beg to present for your consideration the Fourth Annual Report of the Department of Health for the year 1928.

Respectfully submitted,

Forbes Godfrey,
Minister of Health and Labour.

Toronto, February 12th, 1929.

To The Honourable Forbes Godfrey, M.D.,
Minister of Health and Labour.

Sir,—I have the honour to submit for your approval the Fourth Annual Report of the Department of Health, made in conformity with and under the provisions of The Public Health Act for the year 1928.

I have the honour to be, Sir,

Your obedient servant,

W. J. Bell,
Deputy Minister of Health.

Toronto, February 12th, 1929.

DEPARTMENT OF HEALTH

Minister

HONOURABLE FORBES GODFREY, M.D.

Deputy Minister

W. J. BELL, M.B.

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Adam H. Wright, B.A., M.D., M.R.C.S., Eng. ..... Associate in Public Health Education

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E. W. Johnston, B.A.Sc. ..... Assistant Sanitary Engineer
A. T. Byram, B.A.Sc. ..... Assistant Sanitary Engineer

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F. M. R. Bulmer, M.B., B.A.Sc., Med. ..... Special Research
H. E. Rothwell, B.A.Sc., F.C.I.C. ..... Chemist
Alex. R. White ..... Chief Sanitary Inspector

Sanitary Inspectors

D. McKee ..... Sudbury
J. Richardson ..... North Bay
W. C. Millar ..... Fort William
R. B. McCauley ..... Sault Ste. Marie
Hugh McIntyre ..... Cochrane

Dental Services Branch

F. J. Conboy, D.D.S. ..... Director

Vital Statistics Branch

S. J. Manchester ..... Director

Nurse Registration Branch

A. M. Munn, Reg. N. ..... Inspector of Training Schools for Nurses

Public Health Education Branch

Mary Power, B.A. ..... Director

Exhibits and Films

E. H. Jones ..... In charge

Honourary Consultants

Public Health Administration ..... J. G. Fitzgerald, M.D., F.R.S.C.
Pediatrics ..... Alan Brown, B.A., M.B.
Obstetrics ..... Wm. B. Hendry, M.D., D.S.O.
Oral Hygiene ..... Harold Keith Box, D.D.S., PH.D., F.A.A.T., F.A.C.D.

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ANNUAL REPORT

OF THE

Department of Health

of the Province of Ontario

For the Year Ending December 31st, 1928

A RESUME OF THE WORK OF THE DEPARTMENT DURING THE YEAR

Legislation passed at the 1928 Session of the Legislature is contained in *The Public Health Act, 1928*:

Section 55 of *The Public Health Act* is amended by adding thereto the following subsection: Rev. Stat., c. 262, s. 55, amended.

(3) The provisions of subsection 1 shall apply to any person registered and practising as a drugless practitioner under the authority of *The Drugless Practitioners Act*. Reporting communicable disease Rev. Stat., c. 200.

Section 95 of *The Public Health Act* is amended by adding thereto the following subsections: Rev. Stat., c. 262, s. 95 amended.

(17) Where the corporations of the urban municipality and the township do not agree, as provided in subsection 16, as to the right of the township and the inhabitants to make use of such sewage disposal plant or as to the terms of such user, the Ontario Railway and Municipal Board upon the application of the corporation of the township may make an order conferring the right to make use of such sewage disposal system upon the township and upon the inhabitants thereof whose properties are adjacent thereto, and the terms and conditions as to such usage. Sewage disposal plant in another municipality.

(a) The corporation of the township may assess and collect as taxes whatever amount may be agreed upon with the urban municipality for every sewer connection to the sewage disposal plant or any connection therewith under this subsection in the same manner and to the same extent as if the same constituted a public utility owned by the township.

Right to connect with plant.

(18) Where the township does not apply to the Board as provided in subsection 17, the owner of any residence or dwelling in the township in proximity to the sewage disposal plant or to any connection therewith, may apply to the Ontario Railway and Municipal Board for an order declaring that such owner shall have the right to connect his property with such sewage disposal plant or any connection therewith.

Rev. Stat., c. 262, amended.

The Public Health Act is amended by adding thereto the following section:

Issuing debentures to defray expenses of investigation as to sewage disposal.

97*a*.—(1) The municipal council of a city having a population of not less than 100,000 may with the approval of the Ontario Railway and Municipal Board provide by by-law for the issue of debentures for the purpose of raising money to procure investigations and reports as to the method of sewage treatment and disposal best suited to meet the needs of the municipality.

Assent of electors not required.

(2) It shall not be necessary to procure the assent of the electors to any by-law passed pursuant to subsection 1.

Payment out of debentures issued for work.

(3) Instead of making a separate issue of debentures to defray the expenses of such investigation and report, the council may provide that such expenses shall be included in the cost of the work and be paid out of the proceeds of any debentures issued therefor.

Rev. Stat., c. 262, Sched. "B," par. 33, repealed.

The paragraph numbered 33 in the by-law in schedule "B" to *The Public Health Act* is repealed and the following substituted therefor:

Placarding communicable disease and contacts.

33. The medical officer of health within six hours after he has received notice of the existence in any house of any communicable disease or the presence of any communicable disease contacts in respect of which it is his duty to do so, shall affix or cause to be affixed near the entrance of such house, in plain view of the public, a card at least twelve inches wide and nine inches long, stating that such premises are under quarantine on account of such disease and the penalty for removal of such card without the permission of the medical officer of health, and no person shall remove such card without his permission.

REGULATIONS

COPY OF AN ORDER-IN-COUNCIL APPROVED BY THE HONOURABLE THE LIEUTENANT-GOVERNOR, DATED THE 31ST DAY OF AUGUST, A.D. 1928

Upon the recommendation of the Honourable the Minister of Health, the Committee of Council advise that the Superintendents of the Ontario Hospitals and the Medical Superintendents of Tuberculosis Sanatoria in the Province of Ontario, be appointed Sub-registrars, for the purpose of registering deaths that occur in said institutions, and issuing the burial permits with respect to same.

Certified,

C. F. BULMER.
Clerk, Executive Council.

During the year the Department had the misfortune to lose by death two very highly valued members of the staff in the persons of Dr. Charles M. Anderson, Director of Laboratories for the Province of Ontario, and Dr. Joseph W. Hunt, Acting Director of the Division of Preventable Diseases for the Province.

Each of these officers of the Department in his respective field had rendered very valuable service in the promotion and advancement of the public health work in this Province. Their loss is very severely felt, both personally and professionally, in the Department.

Dr. A. L. McNabb has been appointed Director of Laboratories, and Dr. A. L. McKay, Epidemiologist of the Department, has taken on the work of Acting Director of the Division of Preventable Diseases, in addition to his work as Epidemiologist.

Dr. E. C. Beck has been appointed Bacteriologist in the main laboratory, and Dr. G. L. Sparks has been given leave of absence for the year, in order that he may take the D.P.H. course at the University of Toronto.

After a thorough investigation of the situation, it was decided that the Branch Laboratory located at Owen Sound was not giving sufficient service to warrant its continuance, and as a consequence, this Branch Laboratory was closed.

Dr. W. A. R. Michell, Director of the Owen Sound Branch, was transferred to the North Bay Branch to replace Dr. John Douglas, who was selected by the Federal Government to go overseas in connection with the medical examination of intending emigrants to Canada.

At the beginning of the year a thorough review of Provincial Laboratory Service was undertaken, with the result that a new basis of operation was effected for the carrying on of the Provincial Branch Laboratory at Sault Ste. Marie, and also of the Branch Laboratory at Peterborough, whereby the municipality in each case agreed to assume part of the financial responsibility involved in the maintenance of the laboratory and staff connected with it.

A very important activity undertaken by the Sanitary Engineering Branch was the inspection of the pasteurization equipment in use in various dairies throughout the Province. There is no question as to the value of pasteurization

in the production of safe milk, but it is essential that pasteurization be done efficiently, both as to equipment and technique. In some of the plants the inspectors found defects in installation which rendered the pasteurization of little effect. The correction of these defects has very materially improved the product.

The inspection of Tourist Camps and Highway Refreshment Booths, as carried on for the three previous years, was conducted again in 1928. Practically no improvement was found over the preceding year.

A considerable improvement was noted in municipal installations for waterworks and sewerage. Each year is showing a very decided increase in such installations. Each year municipalities appear to more fully appreciate the benefits that may be derived, both in health and comfort, from municipal expenditures along these lines. Approximately $11,000,000.00 were spent by municipalities in this way during the year 1928.

The control of communicable diseases over the Province generally is still a major activity. Immunization against diphtheria, smallpox and scarlet fever is going ahead satisfactorily, and a greater amount of interest in these activities amongst the Medical Profession generally is being evidenced now than has been the case heretofore.

The Travelling Tuberculosis Clinic examined approximately 1,700 cases during the year. One of the outstanding results of the work of this clinic is that chest infections are being discovered earlier, and are receiving earlier treatment. The education and instruction that this clinic promotes is leading to better care and control of contacts, a shorter period of disability for the infected, a lowering of the expense for treatment of the individual case and a better chance to the individual case for ultimate complete recovery.

The Epidemiologist of the Department went to Winnipeg in November to study the progress and methods of control of the epidemic of poliomyelitis, which Manitoba had the misfortune to have during the autumn of 1928. Dr. McKay brought back with him a full report of the whole situation, which has been made use of in the Department for the development of a programme for dealing with any outbreak of infantile paralysis that may occur in this Province.

During December we experienced the epidemic of influenza that was widespread throughout Canada. The outbreak was not of long duration, nor was it of the same virulence as the outbreak that occurred ten years ago. At the same time, a considerable number of persons succumbed to the infection and its complications.

From the current year's reports of the Registrar-General, one might note that the number of certificates issued for the purpose of immigration are not so large as they have been in previous years. This may probably be accounted for by the fact that the activity relative to natural resources of this Province is holding our people at home.

An investigation into the subject of ventilation has occupied the major portion of the attention of the Industrial Hygiene Division. During the past year several interim reports have been made, but the investigation is still far from complete.

A very satisfactory contact with industry has been made by this Division, to the extent that industry is now inviting this Department of the Government to assist them in solving the many and varied problems that arise in connection with the health of the worker, as it may be influenced by his occupation.

Exhibit work and public health education is being vigorously promoted. The exhibit at Toronto Exhibition—August-September, 1928—was most favourably commented upon by visitors from all parts of the world, and since the exhibition numerous requests have been received by the Department for information on the various activities illustrated in the exhibit. A feature was made of portable exhibits for school fairs and small rural fairs, and it is proposed this coming year to extend this feature very considerably, as it is felt that this is a valuable and popular method of public instruction in matters of health.

The Department distributed during the year biological products and insulin at a net cost of $149,592.50. If the old method of each individual supplying for himself out of his own pocket the funds for the products so distributed were still in use, this figure could very reasonably be multiplied by five, in which case it would exceed the total budget of the Department of Health for the carrying on of the whole health work of the Province.

A detailed statement of the work of the Department submitted by the heads of the various branches follows.

DIVISION OF PREVENTABLE DISEASES

R. R. McClenahan, B.A., M.B., D.P.H., Director
A. L. McKay, B.A., M.B., D.P.H., Acting Director

I have the honour to submit the following report of the activities of the Division of Preventable Diseases for the year ending December 31st, 1928.

I. Communicable Disease Control

Typhoid Fever.—The incidence of typhoid fever in the year 1928 has been nearly 20 per cent. lower than for 1927 and below the average for the cases reported for the six previous years. Two outbreaks were investigated, one in the town of Dundas, consisting of thirteen cases, which was milk-borne in origin, and another of fourteen cases in the Frankford area, which was considered to be water-borne. The months of August, September and October were the peak months of the year, as previously. In collaboration with the laboratories a survey for typhoid carrier incidence amongst recovered cases of typhoid fever was carried out at Kingsville and Chatham. Valuable information was obtained as to the percentage of recovered cases remaining as carriers, and it gave also an opportunity of comparing different methods of collection of specimens by the laboratory, and the adoption of the most successful method for routine use.

Undulant (Malta) Fever.—The recognition of this infection in man was first reported in Ontario early in this year. The adoption by the laboratories of the blood agglutination and blood culture for this infection on July 1 has brought to light fourteen of these cases. Each of these cases was investigated by this Division with the co-operation of the attending physicians for possible sources of infection. In ten of these cases it was found that the infection was received from the ingestion of raw infected milk.

Smallpox.—During the first three months of the year the incidence of smallpox was double that of the average for the previous six years. This was the termination of a marked increase in cases reported that commenced in May, 1927. Since April, 1928, the incidence has been below the average for the previous six years. This previous outbreak resulted in many submitting to vaccination or revaccination and should materially decrease the prevalence of the disease in those districts where vaccination has been generally carried out.

Diphtheria.—Diphtheria incidence has run parallel with the average incidence of the previous six years, except for the last three months of the year when there was a slight decrease in the number of cases reported. Continued interest has been maintained in the administration of the toxoid preventive treatment with greater emphasis on the importance of immunizing the pre-school child. Toxoid is now distributed with three doses constituting one treatment. It has been found that this procedure results in a much higher percentage of those rendered immune.

Scarlet Fever.—Scarlet fever has been slightly below the average incidence throughout the year. Scarlet fever antitoxin for treatment and temporary prophylaxis continues to be used with excellent results. The scarlet fever toxin for active immunization is used particularly in groups where the results may be frequently checked by use of the Dick Test.

Whooping Cough.—Whooping cough remains one of the major problems of communicable disease control. The incidence throughout the whole year has been above the average for the previous six years with a particular increase during August and September.

Poliomyelitis.—An increase of cases reported for the year over the previous year was recorded, but there was no evidence of the disease assuming epidemic proportions. There was an increase of cases in the area west of the Great Lakes. This was probably due to the disease assuming epidemic proportions in the adjacent Province. An epidemiological investigation of these cases was carried out and also a member of the Division staff visited Winnipeg in October to study the methods used by the Provincial and City Health Departments in the control of the disease.

Rabies.—Rabies has been prevalent in several areas within the Province. The eastern counties, Kingston area and the Western Peninsula, all reported a marked increase in this disease amongst animals. One death occurred—in the Windsor area; the child had been bitten by a rabid cat but did not receive anti-rabic treatment. There were distributed 450 treatments for those bitten by rabid or suspected rabid animals.

COMMUNICABLE DISEASES REPORTED FOR THE PROVINCE BY LOCAL BOARDS OF HEALTH FOR THE YEAR 1928

COMPARATIVE TABLE

Diseases	1928		1927	
	Cases	Deaths	Cases	Deaths
Cerebro Spinal Meningitis	42	31	39	25
Chancroid	22	0	36	0
Chickenpox	8,618	2	8,401	0
Conjunctivitis Acute Inf.	21	0	1	0
Diphtheria	2,918	148	3,346	205
Dysentry	5	15	5	22
Encephalitis	24	18	16	12
Gonorrhoea	2,062	0	1,758	0
Influenza	4,730	255	179	156
German measles	242	0	4,214	0
Malignant oedema	2	2	0	0
Malta fever (undulant)	14	0	0	0
Measles	16,188	14	13,405	19
Mumps	19,802	3	5,035	0
Pneumonia	312	1,716	160	1,488
Poliomyelitis	85	7	51	15
Peurperal septicaemia	1	8	0	5
Rabies	1	1	1	1
Scarlet fever	4,508	35	6,289	42
Septic sore throat	109	4	32	1
Smallpox	864	1	1,523	2
Syphilis	1,477	6	1,440	6
Tetanus	2	3	2	0
Trachoma	1	0	0	0
Tuberculosis	1,551	708	1,534	732
Typhoid	715	44	867	35
Whooping cough	4,150	48	3,526	29
Goitre	13	7	3	3

II. Venereal Disease Control

(1) *Distribution of V.D. Supplies:*

(a) Diarsenol—

Size	No. of Ampoules	Cost
0.2	662	$112 54
0.3	890	186 90
0.4	1,427	356 75
0.6	1,800	594 00
2.0	3,247	2,357 84
		$3,608 03

(b) Mercury Salicylate—

Size	No. of Ampoules	Cost
1 gr	8,392	$429 00
5 gr	1,353	207 92
		$636 92

(c) Bismuth Hydrate—

Size	No. of Ampoules	Cost
2 gr	9,669	$460 00
10 gr	1,622	249 75
		$709 75

(d) Silver Nitrate— No. of Ampoules	38,214	$1,106 20
(e) Sodium Hydroxide— No. of ounces	2,526	25 26
(f) Distilled Water— No. of ounces	28,806	244 84
(g) Intravenous Outfits	20	120 00
Total		$6,449 00

(2) *Clinics:*

Number of clinics, 18.

Situated at Toronto (6), Hamilton, Brantford, London, Windsor, Owen Sound, Ottawa, Fort William, Kitchener, St. Catharines, Kingston, Peterborough, Sault Ste. Marie.

1. Number of cases treated	6,820
2. Number of new cases treated	3,464
3. Number of treatments	102,413
4. Number of contacts and alleged sources of infection examined	1,179
5. Average number of patients under treatment per month	3,143
6. Number of visits made by the nurses	5,147

1. Cases treated 6,820

	Male	Female
Syphilis	2,037	1,562
Gonorrhoea	1,976	929
Double infection	136	180

2. New cases 3,464

	Male	Female
Syphilis	821	542
Gonorrhoea	1,380	560
Double infection	71	90
Chancroid	6	.....

New cases syphilis classified 1,201

	Male	Female	
Primary	117	39	156
Secondary	157	165	322
Tertiary	425	298	723

New cases gonorrhoea classified..... 1,863

	Male	Female
1. 1,049	821	228
2. 358	242	116
3. 456	243	213

New cases..... 3,464
Social histories taken..... 2,588
Cases referred by doctors, 591; friend, 500; self, 510; hospitals, 280; Department of Health, 189; clinics, 176; social agency, 108; jails, 80; contacts, 29; police, 51, posters, 14, sources, 3; parents, 57.

3. Number of treatments..... 102,413

	Male	Female
Syphilis	25,719	20,641
Gonorrhoea	44,228	11,772
Chancroid	53	.....

4. Number of contacts and sources examined..... 1,179

Positive for syphilis	252
Positive for gonorrhoea	258
Negative	669

Children treated..... 495
Old..... 347
New..... 148
Treatments..... 4,597

	Male	Female
Syphilis	1,412	1,506
Gonorrhoea	147	1,532

(3) Number of patients treated in hospitals where clinics are situated:

	Male	Female
Syphilis	503	390
Gonorrhoea	271	275
Double infection	30	33

Number of days in hospital..... 21,037

	Male	Female
Syphilis	7,136	5,494
Gonorrhoea	3,087	5,320

Discharged from clinics..... 2,951

Apparently Cured—	
Syphilis	330
Gonorrhoea	703
Transferred—	
Syphilis	353
Gonorrhoea	270
Lost	1,295

(4) V.D. Clinics in Penal Institutions—
Number of institutions..... 5
1. Number of cases treated in institution..... 654

	Male	Female
Syphilis	298	107
Gonorrhoea	138	111

2. Number of treatments given in institution..... 23,354

	Male	Female
Syphilis	3,343	2,119
Gonorrhoea	13,900	3,992

(5) COMPARATIVE TABLE

	Total Cases	New Cases	Treatments
1924	5,163	2,285	75,784
1925	6,573	2,889	98,845
1926	8,395	2,824	85,682
1927	7,872	2,862	88,605
1928	6,820	3,464	102,360

III. Tuberculosis

(1) The Travelling Diagnostic Clinic for disease of the lungs visited the following places: Smith's Falls, Brockville, Carleton Place, Napanee, Arnprior, Sault Ste. Marie, Oshawa, Kemptville, Prescott, Winchester, Chesterville, Alexandria, Port Arthur, Fort William, Massey, Blind River, Thessalon, Manitoulin, Gore Bay, Mindemoya, Little Current, Wiarton, Clinton, North Bay, Renfrew, Pembroke, Stratford, Owen Sound. In all, 1,632 cases were examined.

(2) Maintenance of patients in sanatoria from unorganized territory—

Cost	$17,647 64

IV. Cost of V.D. Control

V.D. supplies distributed	$6,449 00
Treatments in clinics	58,617 50
Salaries to clinic staff	20,500 00
Department clinics	300 00
Total cost	$85,866 50
Federal grant	32,425 93
Cost to Ontario	$53,440 57

V. Cost of Biological Products and Insulin

	Amount	Cost
Smallpox vaccine	180,122	$8,105 49
Diphtheria antitoxin	272,804 M units	33,448 16
" syringes	7,397	1,479 40
" toxoid (for 1)	7,202	1,440 40
" " (6 persons)	2,932	2,345 60
" " (12 persons)	5,136	5,136 00
Schick test	2,277	455 40
Anti-meningococcic serum	1,805	1,805 00
" (spinal outfits)	219	98 55
Tetanus antitoxin	35,845,500	10,753 55
" syringes	1,249	245 80
" spinal outfits	185	83 25
Scarlet fever antitoxin (2 cc)	7,787	3,114 80
" " " (15 cc)	7,147	16,580 75
" " (syringes)	130	318 50
" " (toxin)	3,393	1,017 90
" " (toxin) (6)	1,505	1,505 00
Dick test outfits	3,289	657 80
Anti-rabic treatments	448	4,704 00
" syringes	42	525 00
Typhoid vaccine	67,460 cc.	.....
Pertussis vaccine	80,200 cc.	.....
		$93,820 35
Insulin, 12,579,300 units	.....	51,317 20
Total		$145,137 55

VI. Social Service

Outside places visited	52
Clinic visits (24 out of town)	48
Lectures with films	57
Attendance	5,312
Meetings (no film)	12

COMMUNICABLE DISEASES REPORTED BY LOCAL BOARDS OF HEALTH FOR YEAR 1928

1928	Smallpox		Scarlet Fever		Diphtheria		Measles		Whooping Cough		Typhoid		Tuberculosis		Poliomyelitis		Cerebro Spinal Meningitis		Influenza		Acute Primary Pneumonia		Syphilis		Gonorrhoea		Chancroid		Chicken Pox		Encephalitis Lethargica		German Measles		Mumps		Septic Sore Throat	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
January	288	1	533	3	325	14	1,149	1	342	3	50	6	101	58	2	0	2	3	15	11	25	188	124	0	142	0	2	0	1,141	0	3	1	33	0	3,596	0	4	1
February	204	0	685	2	271	14	1,599	1	333	8	41	2	122	50	0	0	2	3	15	23	38	192	74	0	107	0	1	0	939	0	6	2	41	0	4,244	0	55	1
March	130	0	667	1	235	17	2,299	1	422	0	40	1	157	72	2	1	2	3	37	18	47	244	243	1	331	0	0	0	1,026	0	0	4	42	0	5,467	2	23	0
April	51	0	437	2	207	8	2,021	0	268	9	19	3	119	66	3	0	2	2	6	12	14	183	184	0	115	0	0	0	541	0	0	1	32	0	2,570	0	12	0
May	41	0	375	7	208	11	2,003	2	292	5	41	2	163	68	1	1	7	5	47	15	20	158	72	3	113	0	0	0	547	0	4	1	22	0	1,195	0	1	0
June	41	0	378	2	216	15	2,403	3	310	6	38	2	164	81	1	1	6	4	61	44	22	166	131	0	166	0	2	0	1,043	0	5	3	15	0	1,063	0	1	0
July	18	0	148	1	155	8	903	0	218	3	48	4	123	41	3	0	5	4	5	9	5	68	72	1	129	0	1	0	398	1	0	1	4	0	295	0	0	0
August	5	0	67	0	157	8	265	11	430	1	79	5	123	73	3	1	2	1	3	5	15	24	89	0	152	0	0	0	142	0	0	0	0	0	171	0	2	1
September	31	0	164	3	238	10	87	1	490	7	138	4	127	55	27	2	3	0	0	6	6	75	161	1	269	0	1	0	128	0	1	1	3	0	169	1	0	0
October	23	0	194	1	287	14	185	0	250	5	89	3	102	44	23	1	2	2	12	6	10	69	86	0	185	0	0	0	411	0	2	0	8	0	196	0	0	0
November	16	0	316	6	210	10	709	0	335	1	41	8	85	56	16	0	5	0	1	12	18	92	92	0	96	0	2	0	810	0	2	2	15	0	329	0	1	0
December	16	0	544	7	409	19	2,565	4	460	0	91	4	165	44	4	0	4	4	4,528	94	92	257	149	0	257	0	13	0	1,492	1	1	2	27	0	507	0	10	1
Total	864	1	4,508	35	2,918	148	16,188	24	4,147	48	715	44	1,551	708	85	7	42	31	4,730	255	312	1,716	1,477	6	2,062	0	22	0	8,618	2	24	18	242	0	19,802	3	109	4
1927	1,523	2	6,289	42	3,346	205	13,405	19	3,526	29	867	35	1,534	732	51	15	39	25	179	156	160	1,488	1,440	6	1,758	0	36	0	8,401	0	16	12	4,214	0	5,035	0	32	1
1926	706	3	5,640	38	2,818	179	18,420	42	3,679	67	581	32	1,660	821	71	6	37	23	0	388	0	2,169	1,256	0	1,539	0	11	0	7,787	0	21	16	3,223	0	1,784	0	18	1

DIVISION OF INDUSTRIAL HYGIENE

J. G. Cunningham, M.B., Director

Medical services rendered to the industrial population from the standpoint of the peculiar needs of industry are increasing. Such services are not developing without conscious effort on the part of the employers, wage-earners and physicians to come together frequently and before medical emergencies arise.

While the problems of accidents and general sickness are first in importance, the attention of industry is frequently focussed on the need for organized medical service for prevention by some experience with the effects on workmen of one or other of the specific poisons incident to a process.

These facts emerge in the course of the attempt of the Division to further the application of knowledge now available for the prevention of disease and disability among this section of the population.

The number of enquiries from employers, employees, physicians and nurses regarding industrial hazards to health is constantly increasing. The number of plants, both small and large, instituting some measure of medical supervision, varying in scope from the provision of adequate first aid to the supervision of health generally, including attention to minor complaints of ill-health and initial and periodical physical examination, is also increasing.

Literature dealing with different aspects of the subject, both technical and non-technical, has been published this year.

(1) Development of Industrial Hygiene in Canada. R. M. Hutton, Journal of Industrial Hygiene.
(2) Scattered Findings from Recent Studies of Industrial and Community Sickness. R. M. Hutton.
(3) Some Queries About Respiratory Diseases in Industry. R. M. Hutton, Journal of Industrial Hygiene.
(4) Work on Ventilation in Ontario. R. M. Hutton.
(5) Health Promotion in Conjunction with Safety. Dr. J. G. Cunningham.
(6) Infection of Industrial Accidents is Costly. R. M. Hutton.
(7) Health Hazards in the Electro-Plating Shop. Dr. J. G. Cunningham.
(8) Clothes and Colds. R. M. Hutton.
(9) Silicosis and Other Compensable Diseases. Dr. J. G. Cunningham.
(10) Some Clinical and Pathological Observations on Silicosis in Ontario. Dr. A. R. Riddell.
(11) A Study of Atmospheric Conditions in Two Ontario Public Schools. Dr. F. M. R. Bulmer and Mr. H. E. Rothwell.

School Children Entering Industry

A study was made of the physical and mental disabilities recorded on the school cards of three thousand children who left the public schools in Toronto in 1926 and 1927

There was provided by the school medical officer of Windsor, Ontario, a summary covering the same information among a group of 1,300 children of 14 and 16 years of age in the public and high schools and another group of 900 children leaving the technical school there.

A report has been published by the Toronto Health Department, summarizing the results of about 7,500 complete physical examinations of school children in the fourth grade (that is, about to leave public school), conducted in the first ten months of 1927.

The findings in these reports are not comparable in all details either among themselves or with similar reports from other countries.

However, in Great Britain, where for many years examinations of children entering industry up to 16 years of age have been conducted, about 1.7 per cent. are unconditionally rejected and another 2.7 per cent. are employed conditional upon the correction of certain defects. In so far as the meagre Ontario records are comparable, the more serious defects such as those of the circulatory system, pulmonary system and eyes are more prevalent among this group here than in Great Britain. This 5 per cent. of yearly recruits to industry no doubt have a considerable bearing on the numbers of accidents and illnesses occurring among young adult workers.

Some provision should be made for the physical examination of children leaving school to enter industry, conducted, in the light of suitability for the work for which the child has been chosen, by physicians familiar with industrial processes. These examinations should be paid for by the employer of this type of labour and the details should be worked out in close association with the final school examination.

(*a*) Silicosis

A number of small groups of workers have been examined where exposure to silica dust was known to exist. To date, in no instance has silicosis in the ante-primary stage or later stage been found to exist except where there was exposure to silica as silicondioxide.

Among 34 brick and tile workers, 8 cotton carders, 26 workers in cement working, 69 grain-elevator men, all exposed to high dust content in the air (some of them for many years), there were present no cases of silicosis.

Among 100 miners, 97 granite cutters and a few grinders with natural abrasive wheels, there were a number of cases of silicosis.

Next to mining, the granite-cutting trade, as is appreciated by employer and employee alike, requires additional measures for the control of this condition. Among 97 granite cutters, all with 15 years' experience, there were 34 cases of silicosis in the ante-primary or later stage of the disease. As a result, there has been suggested compulsory initial and periodic physical examination of workers. At the same time, measures for the control of the dust have been improved.

(*b*) Lead Poisoning

Among those exposed to lead there have been a number of workmen examined from a great variety of processes, with small groups from among those spraying paint and those recovering the metal from scrap. As might be expected, the latter group presented evidences of lead absorption. Among 15 spray painters using a paint without lead content, the most constant abnormality found was the presence of an eosinophilia.

The medical arrangements for supervision of workers in storage battery industries are still in operation. The conditions of work in some of these plants are not such as to make it possible to prevent lead poisoning entirely. Experience elsewhere is that specific regulations regarding lead poisoning have been necessary to control the hazard. They may yet be necessary here.

(*c*) Arsenic

In the course of supervision by the plant physician of a group of workers exposed to arsenic trioxide, 125 examinations have been conducted by the Division. Improved conditions, with initial and periodic physical examinations, have been supplemented by the study by the plant chemists of the arsenic excretions in these workmen.

Employment under conditions of increased exposure to arsenic has been accompanied by an increased arsenic excretion in urine and increased manifestations of poisoning. Removal from exposure has been followed by marked reduction in the arsenic excretion in urine with signs of poisoning subsiding. Skin manifestations of poisoning have been the first to appear and the first to subside, except in the most severe cases where certain skin manifestations have persisted. Improvement has beeen accompanied by considerable gain in weight.

In attempting to control the hazard, the rise in arsenic excretion in urine has preceded the development of symptoms and signs so closely as to warrant removal from exposure when the "as" excretion rises to 1 mg. per litre of urine.

(*d*) Chromium

The increasing use of chromium compounds in electro-plating has resulted in the fairly frequent occurrence of chrome ulcers which are persistent and painful. Recommendations for prevention have been made.

(*e*) Sugar Dermatitis

A number of cases of dermatitis have been investigated among women workers handling icing sugar in the manufacture of biscuits. Dr. A. R. Riddell has isolated an organism from lesions produced by this type of work which has not yet been definitely proved to be the determining factor.

Masks

Some months ago Dr. F. M. R. Bulmer of the Division proposed the use of a positive pressure mask for protection of workmen against fumes and dust. Samples made here have proven to be effective, comfortable and inexpensive. A group of workers has used this mask under exposure to lead and silica dust with quite satisfactory results. It is, of course, practicable only where compressed air is available and if the few now in use are satisfactory after further trial, larger numbers will be made available for use, particularly where mechanical means of control of dust and fumes are impracticable or only partially effective.

Ventilation

In January, 1928, was published "A Study of Atmospheric Conditions in Two Ontario Schools." This work has been continued in London, Ontario, where the co-operation of all officials has been most gratifying.

There have been some interesting observations made on the ventilation conditions produced with the type of ventilation equipment commonly in use in city schools in Ontairo. One important point is, that with equipment based on the supply of 30 cubic feet of air per pupil, per minute, the variations in the amount of air delivered from room to room are great, and when the supply delivered by the system is on the basis of 15 feet (cubic) per pupil, per minute, the variations here are also well marked, but variations in velocity of air, recorded with the Kata thermometer in different parts of both groups of rooms, are small.

Factory Inspection

A number of problems have been submitted by the Factory Inspection Branch of the Labour Department and the Industrial Accident Prevention Associations, mainly involving the chemical analysis, by Mr. H. E. Rothwell, Chemist of the Division, of substances considered to be hazardous to health, and the inspection of factory premises with the district factory inspector.

Analyses of this type, supplemented by clinical laboratory analyses, have also been necessary in the routine work of the Division. Among these have been 31 urine examinations for the presence of lead, the collections, estimations and analyses of many samples of fumes and dusts to which workmen are exposed, together with the microscopic examinations of upward of 500 blood smears.

Close co-operation has existed between this Division and the Tuberculosis Section of the Preventable Diseases Division in chest examinations arranged by the Industrial Division for the examination of industrial workers exposed to dusts and by the Tuberculosis Section for the examination of tuberculosis contacts.

Chief Sanitary Inspector
Alex. R. White

I have the honour to submit for your consideration the Twelfth Annual Report, showing work performed by your group of inspectors during the year 1928.

The year just closed has been one of steady progress. There have been no serious epidemics of communicable disease, although sporadic outbreaks of smallpox, scarlet fever and mumps occurred in the districts of Sudbury, Cochrane and at Hearst. No special trouble was occasioned, however, in bringing these matters under control for as stated in last year's report the combination of your inspectors, assisted by the industrial physician, with the excellent co-operation of the industries affected, generally succeeds in quickly controlling the situation.

There were no new reforms introduced during the year although special efforts were made to further develop supervision by the physician from the standpoint of disability reduction. We have been specially anxious in this regard since our popularity with industry would seem to, in large measure, depend on our success. Indeed on numerous occasions it has been necessary to address meetings at the invitation of company management in an effort to properly focus the contributory causes of waste arising out of lost time due to sickness and accident.

The widespread epidemic of influenza so prevalent in populated centres did not, for some unexplained reason, invade our northern industrial regions. Indeed the disease was most conspicuous by its absence. Each of our inspectors made a point of this and attribute as one of the reasons the good ventilation provided. Our Western Inspector states that in a group of lumber camps situated near International Falls, Minnesota, hundreds of men were down with the disease and that some twelve deaths resulted, while on the Ontario side with only the District of Rainy River between, practically no cases resulted among the fifteen hundred men employed at the same work. This is extremely difficult to understand. A canvass of the physicians took place, however, and they cited as their opinion the small turnover of men, excellent hygienic surroundings, the single-width bed which reduces contact, and the rapid change of air by good ventilation. The employer remembers the previous visitation of this disease among his camps and the terrific cost occasioned thereby with the resultant high mortality.

and he has been most helpful to the Department by his many suggestions and assistance given and believes that the new type of sanitary camp introduced has contributed in no small measure to the present happy situation.

There has been a slight falling off in the number of camps in operation and also in men employed in the woods this year. This is largely due to the unsettled condition of the pulp and paper market.

The mills in connection with this industry have been running on half production and in addition have been making large purchases of wood from settlers which has reduced the camp total very considerably.

The number of companies operating was 105; total camps used 425, employing 17,047 men, which is somewhat short of our last year's total of 24,516.

In addition, of course, we have the mining industry which is growing by leaps and bounds and has increased almost one-third over last year.

There are now in the unorganized territories:

152 Mining camps	employing	8,430	men
117 Construction and road camps	"	8,110	"
56 Saw mills and paper mills	"	5,340	"
9 Fishing stations	"	775	"
2 Stone quarries	"	250	"

and also, of course, the very numerous railway extra gang camps which are scattered all over the north. We have, therefore, a responsibility for approximately 40,000 men employed in the 761 camps in our industrial north.

All of this work is, of course, covered by contract between the employer and a physician, and in connection therewith the physicians have forwarded to the Department 753 monthly reports and submitted 209 sketches of new camps. Added to this are the inspections made by your staff of sanitary inspectors which inspections number 740, which make a grand total for the year of 1,493 inspections made.

In addition to the above we have also rendered such service as was necessary to the host of small towns throughout the North, very often at the request of the local board of health or its officials.

Communicable Diseases

Our case record from communicable disease is slightly less than that of last year when 44 cases and 4 deaths were reported. This year we have:

Typhoid fever	5 cases	0 deaths
Smallpox	26 "	0 "
Scarlet fever	1 case	0 "
Diphtheria	2 cases	0 "
Mumps	5 "	0 "
Chickenpox	1 case	0 "
Total	40 cases	0 deaths

As previously mentioned the outbreaks were of a sporadic nature and occasioned us no particular difficulty in bringing them under control.

The placing of an inspector in the Renfrew area has done much to solve many of our troubles along the railway from Ottawa to Parry Sound, and for the first time within my knowledge has provided a service with which to deal with the many complaints which so frequently arise from men employed in camps in this territory, although organized. It appears to me at times that perhaps all camps, whether in organized or unorganized territories, should immediately come under our regulations, at least for the sake of uniformity. There is a vast difference between camps in these two areas, and while ordinarily

one might expect that camps in settled districts would be much above the average this is not generally the case and is due in large measure to lack of attention by the officials of the local board of health who object to the great distances to be travelled to reach the work, and in addition the lack of a standard from which to build. Again the operator in settled territory has been given an advantage, in cost of construction, over the employer in the unorganized districts, since in the one case any kind of housing may suffice, while in the other a most exacting standard must be conformed to. I believe, therefore, for these reasons a real service to the men employed in camps would accrue by placing all camps wherever situated under the arrangements provided by our regulations.

As in other years we have also paid a great deal of attention to the sanitation of summer resorts and we are in a position to recommend the many scattered throughout the north as safe places to spend a holiday.

Our Mr. Smith has assisted the district officer, for the first time, to complete a survey of the Rideau Lakes District, and while the time spent in this work could ill be spared, yet it has assisted in making the situation at these summer camps known, and provision made to deal with the many nuisances discovered, some of which could easily have become serious had not prompt action been taken.

It is also my belief that if the mining industry continues to expand, particularly in the Red Lake and Woman Lake Districts, a new appointment may require to be made. The district mentioned is 150 miles from the railroad and means the absence of six weeks from office if served by our Fort William inspector who already has too much work to attend to, particularly since he is also acting as District Officer in the absence of Dr. Sparks, which additional service I consider a great compliment to our group of inspectors, and demonstrates what may be accomplished by inspectors in the Province, generally speaking, if proper opportunity and instruction are provided.

There have been several Police Court actions during the year. These, however, were undertaken after all other means had failed. I am glad, however, to say that such cases are becoming rare and may eventually become unnecessary.

Opportunities to address public meetings on health subjects have been embraced whenever possible and many articles have been written for publication which I believe tends to further the ideals of our work and broaden our sphere of usefulness as well as assisting the public to better understand the value of our efforts.

I also wish at this time to pay tribute to our staff of inspectors and to the Division of Industrial Hygiene generally as well as to the Department as a whole who have assisted in making this report possible, and for the friendly and co-operative feeling shown us during the year.

DIVISION OF CHILD HYGIENE AND PUBLIC HEALTH NURSING

JOHN T. PHAIR, M.B., D.P.H., Director

The activities of the Division are as diversified as its name implies, extending all the way from an interest in the satisfactory establishment of pre-natal care for the expectant mother to the initiation of home-nursing classes in rural communities. The apparent close association that exists between health work through the earlier age groups and public health nursing in all its phases link these two essential public health activities in a more or less indissoluble bond; this is the reason for the unity of administration.

The major responsibilities of the Division have received the consideration their importance warrants during 1928. There has been noted a rather material lessening in the demand for diagnostic clinics for younger children; this, however, is to be expected, in view of the greater interest now given by the general practitioner to the subject of infant and child hygiene. School health supervision continues to take up much of the time of the medical staff. The plan whereby a special course of lectures was given by the staff to the students in the Normal Training Schools in the Province was this year put into effect; nine lectures in all being given, dealing with the control of communicable disease, physical defects commonly found among children and oral hygiene; Dr. Conboy, Director of Dental Hygiene, giving the last-mentioned lectures. The lectures given were of apparent present interest to the students, and both Dr. Conboy and myself received every consideration and help from the teaching staff in the various centres.

There has been a continued interest in many of the smaller centres in the question of the permanent local establishment of school health service. Difficulties of finance and transportation make the rapid extension of this desirable type of health work difficult. Our inability to supply nurses with the necessary special academic qualifications is equally disturbing. While the last-mentioned difficulty may be possible of early solution, the others may necessitate some material readjustment of our present preconceived ideas of this service. With the hope in mind that it would be possible to learn something at first hand of the difficulties associated with the permanent operation of a rural programme, seven demonstration units were established throughout Southern Ontario early in the fall and will be operated during the winter months by members of the nursing and medical staff of the Division. It is hoped that the results of this study will be available towards the end of the coming year.

The co-ordination of the school health service with the other public health activities carried on by the local Board of Health occupies the serious attention of the health and educational authorities in many of the larger urban centres. As the result of our present experience, it would seem that such co-ordination is highly desirable in such centres as are operating a worthwhile community health programme. The active co-operation of the entire local educational machinery is so essential, however, to the conduct of a satisfactory service, that unless this is assured, the transfer is of doubtful value.

We note with regret the loss of several valued members of the nursing staff; this, however, is inevitable, and the choice of these individuals by other organizations for positions of importance and trust is a compliment to the staff of this Division.

The nursing staff have completed in many parts of Northern and Northwestern Ontario their experimental period of service, and it is hoped that following their withdrawal the districts previously served will be so seized with the value of the work of which they are now deprived that they will of their own volition inaugurate a local service.

Much of the work done by the staff is difficult of computation; the following figures, however, give some conception of the activities of the Division:

The staff operating in the more sparsely settled portions of the Province made routine physical inspections of some 37,859 children; made 32,034 home visits—2,821 of these visits were for the purpose of discussing infant care with interested mothers; 4,862 re pre-school age children; 9,766 dealt with matters pertaining to the health of the school age group, while the balance were associated with other age groups.

DIVISION OF SANITARY ENGINEERING

A. E. Berry, M.A. Sc., C.E., Ph.D., Director

I have the honour to submit herewith a resume of the work of the Sanitary Engineering Division for the year 1928.

The past year has been a particularly active one in the field of waterworks and sewerage. The Division has assisted in the development of such projects wherever conditions were felt to warrant action. The works undertaken during the year, as well as those planned for the immediate future, comprise new systems and extensions to existing works. Much interest has been shown in the smaller centres, and it is felt that these facilities will be more rapidly extended to the rural areas than in the past. The attached article on waterworks and sewerage developments contains the details of the various projects.

Operation of Waterworks and Sewerage Plants

Engineers of the Division have continued to make periodic examinations of water treatment plants throughout the Province. This work is of great assistance to the operators of these plants, and to the protection of the health of the water consumers. A very considerable number of difficulties or faults in operation are found by the inspections. The Department has continued to supply, free of charge, ortho-tolidin solution and colour standards for use in the adjustment of chlorination dosages. This has simplified water chlorination tremendously, and the large number of machines now in operation in the Province, most of which are not in duplicate, calls for the use of every means which will facilitate safe operation.

The operation of some waterworks plants seems to indicate carelessness on the part of the men in charge. It has been very difficult, in some places, to have operators realize the importance of careful and continuous water treatment. In other cases lack of adequate training has been a decided handicap. To overcome these conditions two measures seem necessary: (1) Provision of facilities whereby operators of such plants will have an opportunity to improve their knowledge of the fundamental principles and methods necessary for successful operation. (2) Introduction of some licensing system whereby every operator will be required to have an uncancelled license to operate the plant; such licenses to be subject to cancellation for carelessness or lack of the requisite knowledge.

Efficient operation of both waterworks and sewerage systems are necessary not only as a public health protection but to ensure that the plants will produce adequate results in respect to cost, service and safety of product. Waterworks and sewerage systems entail very heavy capital expenditures and maintenance charges. Such expenditures should justify the best operation and the employment of skilled personnel.

Water Chlorination Installations

New chlorination plants continue to be installed, and the number of water supplies not fully protected to decrease. Primary installations were made last year at Arnprior, Burwash, Keewatin, Picton, Swastika and Thistletown. Replacements or additions were made at Belleville, Brockville, Fisherville

Experimental Farm, Gananoque, Hanover, Kenora, London, Niagara Falls, Peterborough, Port Colborne, Prescott, Rockland, Scarborough Bluffs, Toronto, Walkerville, Weston and Windsor. Over 75 per cent. of all water used for domestic purposes is now chlorinated.

Fire Supplies

A number of waterworks systems in the Province have for years been regarded for fire purposes only and not for domestic use. Nevertheless in some cases these distribution systems supply private homes and public buildings, such as restaurants, hotels, etc. Unless the water is exceedingly unpalatable there is a tendency for general use to be made of it even in the private homes. It is also very frequently available in hotels and public buildings where transients are not familiar with its qualities. This is a very dangerous practice, and calls for the elimination of these polluted sources of supply as speedily as possible. In some cases the difficulties of such a programme are very great and some delay will be inevitable. During the last year three of these supplies have been improved, viz., Picton, Campbellford and Strathroy. The remaining fire supplies are Blyth, Bothwell, Caledonia, Campbellford, Chesterville, Clarksburg, Dresden, Exeter, Lucknow, Paisley, Streetsville, Teeswater, Thamesville, Tilbury, Uxbridge, Victoria Harbour.

Sanitary Surveys

During the year sanitary surveys were made in the following municipalities:

Ailsa Craig	Bothwell	Huttonville	Pt. Edward	Watford
Alvinston	Courtright	Lucan	Springfield	Westboro
Arkona	Dresden	Oil Springs	Thedford	Wyoming
Aylmer	Fisherville	Parkhill	Tillsonburg	
Bolton	Hearst	Petrolia	Vankleek Hill	

This information has proven to be very useful in pointing out the dangers of inadequate sanitation in municipalities and has been a very great inducement to the installation of waterworks and sewerage systems. The total number of municipalities surveyed to date is 225.

Recreational Sanitation

Tourist camps and refreshment booths received the usual attention during the tourist season. The policy of the Department was continued whereby inspections were made of all camps and refreshment booths. No licensing was attempted, but where the services offered met the standards of the Department certificates of approval with conspicuous banners were awarded. These have materially aided the business of the approved camps, and have created for the travelling public at least some safe services. Unfortunately only a small portion of the total number of these booths and camps have been approved. Unless competition plays a part the tendency is for the operator to proceed according to his own methods. During the year approvals were issued to 93 camps, out of a total of 478 examined. Approvals were also issued to 138 refreshment booths, out of 1,025 examined. Lists of approved camps and booths are attached.

Typhoid Fever

No serious typhoid fever outbreaks were experienced in the Province during the year. Small epidemics were recorded at Dundas and Frankford. The former comprised some 16 cases, and was attributed to a milk supply, the control of which is not directly within the jurisdiction of this Department. At Frankford 15 cases were reported following a community banquet. All of the cases had been present on this occasion. Under such conditions the specific source of the infection is difficult to determine. Water from a nearby private well was regarded as a likely cause of the outbreak. A number of cases without any apparent single focus of infection developed in Timmins during the autumn. These were so scattered that their origin might possibly be attributed to the spread of carriers from the Cochrane epidemic. Such sporadic cases are almost certain to result until more control can be exercised over the "carrier." The number of deaths reported from typhoid fever during the year was 78. This is 31 less than the previous year, and represents a death rate of 2.4 per 100,000 population.

Milk Control

Examination of milk pasteurizing plants was continued from the previous year, and the work completed except for a few isolated plants. In all, 112 plants were examined, and detailed information secured concerning the equipment and the methods of operation. The results showed conclusively that there is a very urgent demand for some central supervision over these plants, in order that the milk which is labelled "pasteurized" shall stand for what health officials expect it to signify, and be entirely safe for human consumption without any material change in food value or taste. The great majority of the plants studied required alteration to bring them up to a satisfactory standard. The defects which have appeared in these plants are not, in general, due to the owners or operators, but due to the sale of improper machinery, and a lack of knowledge as to what is the best practice.

Water and Sewerage Certificates Issued

Certificates for waterworks and sewerage installations and extensions issued during the year represent an expenditure of $10,971,830.14.

Waterworks and Sewerage Installations

The initiation of waterworks and sewerage programmes may be said to be dependent in general upon two factors: (1) The financial condition of the times, (2) the demand of the public for modern utilities. When financial conditions are unfavourable, as during the post-war period, municipal construction programmes are inclined to be curtailed to the utmost, and only the most urgent work is undertaken. The return of more prosperous times invariably creates, on the part of the public, a more incessant demand for higher standards of living and better services for the home.

The past year has witnessed tremendous building activities—considerably greater than in any previous year. Waterworks and sewerage programmes have kept pace with other construction. More activity has been shown in this field during the past year than in any other year since before the war. That this

increase will at least be maintained this year is indicated by the large number of works already planned. It is apparent that these installations have been influenced by favourable financial conditions, but it is also encouraging to note the increasing demand for such facilities in the smaller centres. Waterworks and sewers are now viewed favourably in municipalities where the population is actually decreasing and where such expenditures in the past would have been strongly opposed. Improved methods of transportation with greater mingling of population should tend to increase the demand for modern conveniences in the smaller centres. In this programme engineers and health officials will have an opportunity to be of signal service to the public, and to materially improve the sanitary conditions of environment and to protect the health of communities.

Waterworks Undertaken in 1928

In the waterworks field a number of new projects were undertaken last year. Complete new systems were installed at Glencoe, Blind River and Swastika. The latter involved filtration and chlorination of a surface supply. In addition to these, the town of Picton undertook an expenditure of $50,000 for a new intake, pumping station, filtration and chlorination. Strathroy developed an additional source of supply from deep wells, and made the system available for the first time for all domestic purposes.

Water Extensions, 1928

Considerable sums were spent during the past year for waterworks extensions in several municipalities: Hamilton proceeded on an expenditure of $182,000 to extend mains to the Barton Township area recently annexed by the city. The city also undertook a number of extensions to their distribution system involving expenditures of considerable amounts. Main extensions were also made at Toronto and adjoining townships, London, Windsor and Essex Border Municipalities, Kitchener, Oshawa, Port Arthur, Fort William, Welland, and others.

Deep Well Water Supplies

A marked increase has been noted recently in the use of deep wells as sources of water supply. This might be attributed either to an appreciation of the knowledge that such sources are feasible and particularly when a guarantee can be secured for the required quantity of water; or to the installation of supplies for inland municipalities where the choice of sources is limited. Successful installations were made last year at Brampton to replace an objectionable lake supply containing an abnormal quantity of algae; at Palmerston, Glencoe, Blind River, Strathroy, and Blenheim. Consideration will be given this year for similar supplies in Wheatley, Weston, Vankleek Hill, Capreol, Dresden, Lucknow, Exeter, Courtright, Harrow, Petrolia, Ayr, Alexandria, Alvinston, and others.

Water Treatment, 1928

No outstanding water filtration installations were made last year although some extensions and smaller systems were constructed. Scarboro Township increased the filtering capacity and clear-water storage of the existing plant, and

the Town of Arnprior added increased filtering capacity as well as a new intake, pump well, and pumping equipment. A small filter plant was built at Swastika for domestic supply only and Picton included filters in the treatment of a new source of supply. A filtration plant has also been completed in the Township of Thorold. All these, except Scarboro, are pressure mechanical filters. The latter is a gravity plant.

In water chlorination the number of installations continues to increase. During the past year new machines were purchased for 25 municipalities and institutions, six of which were primary installations. All of these were liquid chlorination units.

Proposed Water Installations

Several new waterworks systems and extensions to existing works have already been planned for construction during the present year. The Village of Yankleek Hill is preparing to install a new system at an expenditure in excess of $75,000. The Village of Wheatley has voted favourably for a municipal system, and has been engaged up to the present in endeavouring to locate a suitable underground water supply. Capreol has also voted in favour of a waterworks system. The Police Village of Westboro and adjoining townsites in the vicinity of Ottawa have under consideration the installation of waterworks in certain defined areas of the township. Waterworks systems are also contemplated in the following municipalities: Alvinston, Harrow, Caledonia, Ayr, Cooksville, Hearst and Tweed.

Waterworks extensions involving large expenditures have been endorsed by the electors at North Bay and Sarnia. The former plans to spend approximately $300,000 for a new intake, pump house, and equipment, feeder mains and improvements to the reservoir. The City of Sarnia has a programme involving $175,000 for supply mains. Hamilton electors voted for an expenditure of nearly $400,000 towards improvements to their supply works. The Town of Campbellford is faced with the problem of extensive alterations in respect to the source of supply hitherto regarded for fire purposes only. Studies have been made in respect to a new source of supply for the townsite of Kirkland Lake.

Proposed Water Treatment Works

The present year should see much progress in water treatment projects. Approval of the electors has been secured for gravity mechanical filtration plants at Ottawa and Niagara Falls involving an expenditure in excess of one and three-quarters millions. Consideration has also been given to the construction of a filtration plant at Belleville. Work on this should proceed at an early date. The City of Brantford is preparing to vote on a similar project in the near future. Construction on the duplicate waterworks system for the City of Toronto, including a filtration plant, is due to proceed this year. The Town of Ingersoll has also under consideration the advisability of proceeding with certain changes in the supply work. The construction of these various plants point to an outstanding year in water treatment installations.

Existing Waterworks Systems in Ontario

The waterworks systems of the Province at the end of 1928 comprised a total of 271 of which 52 were deep-well supplies; 70 river supplies; 53 lake supplies, and 38 springs. The number of filtration plants totalled 48, of which 6

were slow sand; 26 pressure mechanical; 16 gravity mechanical. Chlorination is now almost universal practice with mechanical filters and surface supplies. The total number of supplies so treated is 114. This number comprises over 75 per cent. of the total water supplied for domestic purposes.

Sewerage Installations

Sewerage programmes, during the past year, have shown even more rapid progress than waterworks installations. This may be attributed to an undue postponement of such projects in the past, even more so than waterworks. The advent of the present satisfactory building conditions tends to create enlarged activities in this field. This activity may also result from the exertion of pressure upon offending municipalities with the object of protecting the streams and waterways of the Province. In conjunction with this is a desire for modern conveniences in the home, more pronounced than at any previous period.

A considerable number of sewerage installations were undertaken last year in the Province. New and complete systems were begun at Orangeville, Blind River, Port Colborne, Scarboro Township, North York Township (Armour Heights) and Swastika. Large extensions were also carried out at Toronto, York Township, Forest Hill, Oshawa, Hamilton, Windsor, and Essex Border Municipalities, London, Guelph, Kitchener, St. Catharines, Kirkland Lake, and others.

Sewage Treatment in 1928

Extensive activity in sewage treatment has appeared during the past year both in the number of projects begun and the number planned for an early start. Construction on the North Toronto plant has continued throughout the year, and this will no doubt be put into service in the near future. A new one million gallon plant of the activated sludge type has been undertaken at Scarboro. Smaller plants of similar type have been started at Orangeville, Palmerston, and two at Port Colborne. Small units have also been built at Armour Heights (North York) and the Sick Children's Hospital at Thistletown. All the above works except Scarboro Township are to serve small populations—an encouraging indication of the interest manifest in the smaller centres.

Sewerage Proposals for 1929

A number of new sewerage systems have been under consideration during the past year, and work on these will no doubt proceed at an early date. Swansea has voted in favour of a system involving an expenditure of $125,000. Vankleek Hill has considered the construction of sewers in conjunction with their waterworks programme. Capreol has voted favourably on a sewerage system involving an expenditure, with the waterworks, of $150,000. A new system has been planned for the Town of Hanover, but as yet authorization to proceed has not been given. The Township of Scarboro is in the midst of a large sewerage programme, and the Township of Etobicoke is planning to construct sewers in parts of the township. The Town of Weston proposes to proceed at an early date with the construction of trunk and relief sewers at a cost of $100,000. Alterations to the present system at North Bay will be required in the near future. New sewerage schemes have also been given some thought at Aurora, Alliston, Milton, Essex, Westboro, St. Marys, Port Stanley, Paris, Hearst, and the Grand Marais district adjoining Windsor.

Sewage Treatment Proposals

The past year has been productive of much study and consideration of new disposal plants and extensions which will be undertaken in the near future. An activated sludge plant will be installed at Swansea. The installation of sewers in Etobicoke Township will also require a disposal plant of the same type. Both Oshawa and Kitchener have secured information relative to the construction of new disposal works. London is faced with the construction of additional works in the immediate future. Studies of the Grand Marais drainage situation would seem to point to the development of new disposal plants in that area in the near future. The City of Hamilton has already started on a large sewage treatment project. New plants may also be anticipated for Newmarket, Mount Forest, Milton, Vankleek Hill, North Bay.

Extensions or alterations to existing sewage disposal plants are being considered for the following: Timmins, York Township, Mimico, Peterborough, Stratford, Guelph, and East York.

Ontario Sewerage Systems

The existing sewerage systems of the Province include both separate and combined sewers. It is apparent that local conditions have played an important part in the choice of type. Where storm water can be conveniently discharged and where treatment works are required, the separate system has been generally favoured. In the treatment of sewage, the activated sludge system of disposal continues to be employed in the Province. There are now twenty-three plants either completed or under construction. This is more than twice the number of all other complete treatment plants now in operation. These activated sludge plants vary in capacity from 250,000 to 5,000,000 gallons per day, and produce highly satisfactory effluents.

CERTIFICATES ISSUED RE WATERMAIN EXTENSIONS, PURIFICATION, ETC., FOR THE YEAR 1928

Municipality	No. of Certificates Issued	Extensions	Purification	New
Arnprior	1	.....	$45,000 00	.....
Aurora	2	$31,500 00	.....	.....
Blenheim	1	15,000 00	.....	.....
Blind River	2	.....	.....	$130,326 66
Bowmanville	2	2,938 60	.....	.....
Brampton	1	40,000 00	.....	.....
Bridgeburg	1	5,622 48	.....	.....
Crowland Township	1	1,368 00	.....	.....
Crystal Beach	1	7,938 00	.....	.....
East York Township	5	34,192 81	.....	.....
Elmvale	1	3,800 00	.....	.....
Etobicoke Township	8	17,290 00	.....	.....
Fonthill	2	1,937 00	.....	.....
Ford City	1	13,932 24	.....	.....
Forest Hill	4	54,721 26	.....	.....
Fort Erie	2	6,780 00	.....	.....
Fort Frances	1	22,747 00	.....	.....
Fort William	2	2,032 61	.....	.....
Glencoe	2	.....	.....	85,000 00
Hamilton	10	800,581 00	.....	.....
Hanover	1	1,400 00	.....	.....
Kirkland Lake	1	22,905 85	.....	.....

CERTIFICATES ISSUED RE WATERMAIN EXTENSIONS, PURIFICATION, ETC., FOR THE YEAR 1928—*Continued*

Municipality	No. of Certificates Issued	Extensions	Purification	New
Kitchener	3	$14,553 20	.....	.....
LaSalle	2	14,330 32	.....	.....
Leamington	1	9,900 00	.....	.....
London	4	12,558 00	.....	.....
Maidstone Township	1	6,090 00	.....	.....
Mount Forest	1	4,503 69	.....	.....
Midland	2	22,500 00	.....	.....
Niagara Falls	2	7,686 95	$450,000 00	.....
North York Township	5	51,536 50	.....	.....
Oshawa	3	45,460 40	.....	.....
Palmerston	1	15,000 00	.....	.....
Pembroke	1	3,429 60	.....	.....
Peterborough	1	5,682 29	.....	.....
Picton	1	.....	50,000 00	.....
Port Colborne	1	25,000 00	.....	.....
Riverside	3	5,040 00	.....	.....
St. Catharines	1	8,155 00	.....	.....
Sandwich	4	23,274 02	.....	.....
Sandwich East	2	17,320 00	.....	.....
Sandwich West	8	63,633 26	.....	.....
Scarboro Township	3	100,154 70	.....	.....
Sarnia	1	175,000 00	.....	.....
Strathroy	1	18,000 00	.....	.....
Sudbury	6	40,624 04	.....	.....
Swastika	1	25,322 43	11,910 25	.....
Tecumseh	2	41,933 25	.....	.....
Thorold Township	3	9,462 32	.....	.....
Timmins	1	3,047 80	.....	.....
Toronto	18	151,890 76	.....	.....
Vankleek Hill	1	.....	.....	$76,600 00
Waterloo	2	19,471 50	.....	.....
Welland	1	50,000 00	.....	.....
Westminster Township	1	.....	.....	6,918 00
Weston	6	15,396 45	.....	.....
Windsor	1	230,000 00	.....	.....
York Township	10	60,774 16	.....	.....
Totals	157	$2,383,417 49	$556,910 25	$298,844 66

CERTIFICATES ISSUED RE SEWER EXTENSION FOR THE YEAR 1928

Municipality	No. of Certificates Issued	Extensions	Disposal	New
Amherstburg	3	$25,483 00		
Barrie	1	393 00		
Blind River	1			$65,832 06
Bowmanville	1	1,280 00		
Bracebridge	1	3,864 00		
Brampton	1	7,600 00		
Brantford	1	19,598 84		
Bridgeburg	1	12,321 80		
Brockville	1	24,931 75		
Campbellford	9	30,155 00		
Chatham	1	15,000 00		
Crowland Township	1	3,660 00		
Crystal Beach	5	43,314 00		
Dundas	1	13,000 00		
East York	9	28,575 45		
Elmira	1	2,531 30		
Erin	1	6,345 95		
Etobicoke Township	2	20,400 00		
Ford City	1	38,324 35		
Forest Hill Village	5	175,464 75	$150,000 00	
Fort Erie	3	8,916 00		
Fort Frances	1	7,956 62		
Fort William	2	4,996 30		
Gravenhurst	1	12,500 00		
Guelph	3	43,213 44		
Haileybury	1	2,825 00		
Hamilton	7	118,378 45	195,000 00	
Kenora	1	3,746 00		
Kingston	3	13,799 33		
Lindsay	1	2,200 00		
London	12	38,791 86		
Millbrook	1			9,520 00
Mimico	3	25,637 62		
New Toronto	2	28,225 00		
Niagara Falls	2	5,420 57		
North Bay	1	25,892 98		
North York Township (Armour Heights)	1		26,084 50	11,611 14
Orangeville	4	166,222 00		
Orillia	1	84,023 00		
Oshawa	11	196,386 31		
Ottawa	8	26,563 55		
Owen Sound	4	15,918 52		
Palmerston	1		23,385 00	
Parry Sound	4	7,050 69		
Pembroke	1	2,727 58		
Port Colborne	1			60,000 00
Port Elgin	1	1,350 00		
Port Hope	1	745 00		
Riverside	3	12,735 00		
Swansea	5	26,525 00		
Sudbury	4	107,577 17		
Stratford	3	6,270 29		
Stamford Township	4	31,107 40	1,312 80	
Smith's Falls	1	3,005 00		
Scarboro Township	5		176,300 00	871,274 00
Sault Ste. Marie	4	47,338 60		
Sarnia	2	5,689 00		
Sandwich	12	81,744 78		
Sandwich West	7	220,688 51		
St. Catharines	5	81,569 95		
St. Thomas	1	318 84		
Teck Township	2	42,718 56	19,150 00	
Timmins	1		26,000 00	
Toronto	70	3,671,526 00		

CERTIFICATES ISSUED RE SEWER EXTENSIONS FOR THE YEAR 1928
—Continued

Municipality	No. of Certificates Issued	Extensions	Disposal	New
Walkerville	2	$57,656 50		
Waterloo	3	21,802 40		
Weston	3	12,516 00		
Whitby	4	3,494 16		
Woodstock	1	1,957 25		
York Township	14	315,218 82	$30,000 00	
Totals	284	$6,067,188 24	$656,752 30	$1,008,717 20

SUMMARY

	Applications	Estimated Cost
Re Waterworks:		
Extensions to existing system	147	$2,383,417 49
Purification of water supplies	4	556,910 25
New systems	6	298,844 66
Total	157	$3,239,172 40
Re Sewerage:		
Extensions to existing systems	270	$6,067,188 24
Treatment works	9	656,752 30
New sewerage systems	5	1,008,717 20
Total	284	$7,732,657 74

The total number of applications favourably reported upon re waterworks and sewerage for the year was 441, and involves an estimated expenditure of $10,971,830.14.

VITAL STATISTICS BRANCH

S. J. Manchester, Director

During the past year this Branch issued 41,048 official certificates which gives an average of 3,420 per month. About two-thirds of these were issued for emigration into the U.S.A., which means that there is still an emigration into that country of somewhat over a thousand persons per month.

Approximately 50,000 searches were made during the year which included applications for official certificates, the balance of the searches being made for the purpose of proving Canadian birth for the Mothers' Allowances Commission, Federal Immigration Department, Department of Pensions and National Health, Soldiers' Aid Commission, Royal Canadian Mounted Police, Adoption of Children, etc.

During the year this Branch registered through the channels provided by The Vital Statistics Act, that is the Division Registrars, 137,123 births, marriages and deaths. These were all received, checked, indexed and filed for reference. Besides these registrations there were approximately 6,000 births registered by declaration.

The cash receipts of the Department during the year were $65,640.67.

The annual Statistical Report of Births, Marriages and Deaths issued by this Branch may be had on receipt of application.

DIVISION OF DENTAL SERVICES

F. J. Conboy, D.D.S., Director

The work of the Dental Division for the year 1928 consisted in the main of an aggressive effort to educate the people of the Province to the danger of allowing dental infection to remain in the mouth, and the presentation of a programme for the prevention of dental disease.

Our aim was, first, to induce parents to care for the dental health of their children to the end that the mouths of the new generation might be kept in a condition of health and masticating efficiency, and secondly, that the adult population might be led to accept such dental care as would render them free from dental focal infection. True, some new services were established, and considerable work was done in New Ontario, but our chief objective for the year was to carry on an aggressive mouth health educational campaign.

Dental surveys of school children were conducted in Wooler, Hornepayne, Aylmer, Dundas, Beeton, Chapleau, Waterloo, Longlac, Weston, Sharbot Lake, Goderich, Mimico, New Toronto, Sandwich, Port Hope, Frankford, Owen Sound and other communities. In each case the local dentist, or dentists, gave his services gratuitously, and the Department supplied the necessary forms. Cards were sent to the parents notifying them of the defects found in the mouths of the children, and in numerous cases the necessary treatment was provided.

These surveys led to the desire on the part of the different municipalities to have some permanent form of dental service, but it was felt by the majority of the Boards that they could not undertake to meet the expense unless they had some form of Government assistance.

The Director of Dental Services visited a large number of places during the year and gave illustrated talks to the school children and their parents. He also addressed service clubs and other organizations interested in the dental health welfare of the people. On the majority of these trips he was accompanied by Mr. E. H. Jones, who presented a programme of motion pictures emphasizing the necessity for mouth health, and showing how it might be maintained.

A course of lectures on dentistry was given to the student teachers in each of the Normal Schools. It is well known that it will be impossible to establish dental health services in many parts of the Province, and the only assistance which the children can receive must be provided by the school teacher. The purpose of the course of lectures was to qualify the teacher to teach mouth health, and to advise parents in regard to the treatment which they should endeavour to secure for their children.

The clinic at the Canadian National Exhibition was an outstanding success. It took the form of a public dental health demonstration clinic, and a service which provided free dental examination and advice, including X-ray pictures, for all who made application. About 800 patients presented for examination, and as far as we are able to tell the service provided was in every way satisfactory. The clinic itself was a co-operative effort in which the Faculty of Dentistry of the University of Toronto, the Royal College of Dental Surgeons and the Ontario Dental Association joined with the Ontario Department of Health in an endeavour to improve dental health.

During the summer months a dentist from the Department visited a number of places in the vicinity of Sudbury, Sault Ste. Marie, Port Arthur and Rainy River. He carried a portable equipment, and the children and some adults were given treatment. The majority of these patients lived in places so far remote from a resident dentist that it was practically impossible for them to secure dental services.

Similar work was done through an arrangement made with a dentist who travels through the eastern part of the Province. The dentist operating in Eastern Ontario visited Lavant, Mountain Grove, Kaladar, Calabogie, Barry's Bay, Rickingham, Wilno, Schutts, Rosenthal, Flower, Combermere, Boulter, New Carlow, Palmer Rapids, Whitney and other communities. The work in both Eastern and Northern Ontario was well received, and conditions in these districts warrant the Department carrying on these activities in a larger way next year.

Educational work done by this Division during the past few years has created a public opinion in favour of some form of clinic that will provide treatment for the indigent, and for those living far distant from a centre where there is a resident dentist. Requests are coming in continuously for the organization of school dental clinics, but the majority of the municipalities feel that they cannot meet the expense without some form of Government grant. If a reasonable grant could be made available, many municipalities in Ontario would establish dental services for those who cannot secure treatment in the ordinary way. Following is a report of the work done by the dentist of the Department in Northern Ontario:

Total number of patients examined	853
Silver fillings	335
Copper fillings	90
Pulp cappings	111
Cement	66
Silicate	33
Extractions	167
Treatments	119

DIVISION OF LABORATORIES

A. L. McNabb, B.V.Sc., Director

I have the honour to submit the following report and tabulated statements of the work of the Public Health Laboratories for the year 1928.

It will be noticed during the past year that the number of specimens examined at the central laboratory, East Block, Parliament Buildings, and at several of the branch laboratories have shown an appreciable increase.

From examination of Table II the following will be noted:

The total number of specimens examined in the Public Health Laboratories during the year 1928 was 181,214 which is an increase of 14,686 specimens over the previous year; 10,130 of this increase was made by the central laboratory.

Table III

The total number of diagnostic outfits prepared by the staff of the central laboratory as shown in Table III was 95,245, an increase of 18,727 over the year 1927.

Bacteriology

During the past year the central laboratory manufactured 67,460 cc's. of typhoid and paratyphoid vaccine; also 80,200 cc's. of whooping-cough vaccine which is an increase of 9,080 cc's. of whooping-cough vaccine over last year. This is shown in Table III.

Tables I and II

(a) Diphtheria

As shown in Table I the laboratories examined 24,514 diphtheria cultures. Of this number 10,022 were examined at the central laboratory which is an increase of 991 cultures at the central laboratory over 1927.

The routine at the central laboratory with regard to diphtheria is:

A virulence test is done on all positive contacts and all positive releases where a patient has been in quarantine for one month and on all swabs from suspected carriers. It will be noted that 608 virulence tests were made during the past year which shows an increase of 271 over the previous year.

During 1928 an earnest endeavour has been made to have diphtheria results in the office by 10 o'clock in the morning so that the physicians may obtain their reports without delay. Swabs upon which we have obtained a positive diagnosis are either wired or telephoned. We have not had one complaint during the past year regarding diphtheria reports.

(b) Tuberculosis

Three thousand nine hundred and twenty-five (3,925) specimens of sputum have been examined, an increase of 1,039 over 1927 in the central laboratory. Two hundred and thirty (230) guinea pig inoculations have also been carried out for the presence or absence of tubercle bacilli. You will note that there is a decrease in the number of guinea pig inoculations. This is accounted for by the fact that up to this year we did this work for Christie Street Hospital but as they have opened their own laboratory now they are doing this work.

(c) Typhoid

One thousand two hundred and forty (1,240) specimens of dried blood were examined for typhoid which again shows an increase of 176 specimens made in the central laboratory. Two hundred and ninety-six (296) specimens of whole blood were also examined in this laboratory for typhoid and paratyphoid which shows an increase of 201 specimens over 1927. The work has increased sufficiently during 1928 to warrant placing one worker in charge of typhoid work, and a microscopic and macroscopic examination is made on each specimen of whole blood received. In all cases where results of these two examinations do not check, the tests are repeated. It will thus be seen that this involved considerable work but it was a step in the right direction, as results obtained from whole blood specimens are much more reliable than those obtained from dried blood. We are able to make more accurate dilutions. It is to be hoped that in the future physicians will submit whole blood specimens instead of dried blood specimens for examination for typhoid.

During the past year we have cultured the clot from all whole blood specimens and have been able in many instances to isolate B. Typhosus on culture in specimens taken in the early stage of the disease before agglutinins were present.

Two hundred and thirty-nine (239) specimens of feces and urine were also examined at the central laboratory during 1928 of which 8.33 per cent. were found to be positive.

A report of all positive feces examinations and blood cultures is sent to our Epidemiologist. This undoubtedly assists in the control of this disease.

Since July, 1928, 23 cases of undulant fever have been diagnosed. This is a disease caused by Brucella abortus infection in man and no cases were diagnosed in this Province up to the spring of 1928. The central laboratory placed this examination on its routine and this examination will be included in the routine of our branch laboratories. This service has been greatly appreciated by physicians in as much as it has offered them a diagnosis that hitherto has not been made. The symptoms of this disease are somewhat similar to those of typhoid and all bloods received for Widal examination are agglutinated with typhoid, paratyphoid and Brucella abortus organisms.

(d) Gonorrhoea

Five thousand and eighty-seven (5,087) smears were examined for the presence of gonococci at the central laboratory which is an increase of 1,094 over the previous year.

(e) Rabies

During the past year 76 heads were examined at the central laboratory of which 22 showed the presence of rabies infection, which is 28.94 per cent. One human brain was received and showed the presence of rabies infection both by microscopic examination and animal injection.

The routine at the central laboratory in this work is the microscopic examination of all specimens received and animal injection on all specimens which prove negative microscopically; the animals being observed for two months after injection. In cases where we obtain a positive diagnosis a telegram is sent at once to the sender of the head, and if the sender happens to be a layman the local Medical Officer of Health is notified. The District Officer of Health and the Epidemiologist of the Department are both notified and also the District Veter-

inary Inspector for the Federal Department of Agriculture is advised so that he may take steps to prevent the spread of the disease in the district from which the specimen was received.

(f) Milk

The increase in milk samples examined at the central laboratory was 269 over last year. We are very pleased to see this increase and trust that in the near future it will be much greater.

(g) Water

The water samples examined at the central laboratory during 1928 showed an increase of 1,100.

All the Public Health Laboratories follow the standard methods approved by the American Public Health Association in both water and milk analyses.

(h) Miscellaneous

Six hundred and twenty-one (621) miscellaneous specimens were examined at the central laboratory which shows an increase of 228 specimens. Bacteriological miscellaneous specimens include: specimens of pus for organisms, swabs for culture, pleural fluids for organisms, microscopic examination of urine, pneumococcus typing on specimens of sputum and specimens of food or meat for organisms.

Every effort is being made to give prompt and accurate service with these specimens and that physicians are appreciating this service is readily seen by the yearly increase.

Serology

During the past year 25,946 specimens were examined in the serological section of the central laboratory. Both the Kahn precipitation test and the Wassermann reaction were done on each specimen of blood serum. This has been found a very satisfactory procedure as these tests check in most cases; in any case which does not check the tests are repeated before a report is sent out.

A Wassermann test is made as well as a colloidal gold reaction on each spinal fluid submitted.

The above tests are done five days a week, thus giving prompt service to physicians.

Chemistry

The accompanying table is a summary of the routine work accomplished in the Chemical Section of the Division of Laboratories during the past two years.

	1927	1928
1. Number of samples analyzed:		
Milk (butter fat, solids, preservatives, etc.)	719	1,005
Blood sugar determinations	1,768	2,344
Liquor:		
(*a*) For alcohol	2,271	1,213
(*b*) For medicinal ingredients	84	71
Chemical waters	50	74
Coal	788	479
Miscellaneous	232	374
2. Public health products manufactured:		
Mercury salicylate suspension:		
(*a*) Number of ampoules	7,527	9,835
(*b*) Weight in grains	10,721	15,155
Bismuth hydrate suspension:		
(*a*) Number of ampoules	6,825	11,241
(*b*) Weight in grains	22,922	35,458
Silver nitrate ampoules	35,314	38,214
For administration service:		
(*a*) Ounces of sterile distilled water	21,812	30,050
(*b*) Ounces of normal solution of sodium hydroxide	2,492	2,787

In addition to the foregoing, this Section prepared all the distilled water both ordinary and ammonia free, colloidal gold solution, buffer saline, etc., used by the Bacteriological and Serological Sections.

The analyses of the 211 samples of native wine commenced during 1927 were completed. Also a study was made of the native wine industry which necessitated a visit to the majority of the wineries of the Province. A lengthy report was prepared in connection with both the analyses and the survey. The amount of work devoted during the year to the native wine industry was considerable and much more than offset the diminution in the number of liquor samples submitted for the determination of alcohol.

Branch Laboratories

London

The number of specimens examined this year at the London Branch Laboratory is practically the same as last year and the work done has been most efficient throughout the year.

Ottawa

The work in the Ottawa Branch Laboratory shows an increase of 4,702 specimens over last year. The work has been most satisfactory and that the physicians in the district are appreciating it is shown by the increase in the number of specimens.

Kingston

Kingston Branch Laboratory shows an increase in specimens received during this year. Two cases of undulant fever were diagnosed this year in Kingston Laboratory and during the spring of 1928 an outbreak of rabies occurred in the district; thirteen heads of cattle, sheep and dogs being examined for the presence of Negri bodies.

Fort William, Peterborough, North Bay, Sault Ste. Marie

The above Branch Laboratories have all also rendered valuable and efficient service during the past year.

All of which is respectfully submitted.

A. L. McNabb,
Director of Laboratories.

TABLE I

SPECIMENS EXAMINED BY THE PUBLIC HEALTH LABORATORIES OF THE PROVINCIAL DEPARTMENT OF HEALTH OF ONTARIO DURING THE YEAR 1928

NUMBER OF EXAMINATIONS

Type of Specimen	Toronto	London	Ottawa	Kingston	Fort William	Peterboro	North Bay	Sault Ste. Marie	Total
(*a*) BACTERIOLOGY									
Diphtheria:									
Direct examinations	2,376	684	1,696	200	86	384	14	8	5,448
Cultures	10,022	4,048	6,307	630	852	739	349	1,567	24,514
Virulence tests	608	10	10	.....	11	8	1	.....	648
Tuberculosis:									
Sputums	3,925	1,690	1,285	1,056	403	315	421	150	9,245
Guinea pigs injected	230	60	9	6	1	6	.....	3	315
Typhoid:									
Micro agglutination	1,240	646	288	59	124	70	194	.....	2,621
Macro agglutination	296	4	12	174	.....	18	2	24	530
Blood culture	212	9	4	13	4	1	.....	12	255
Faeces and urine	239	155	14	16	6	.....	6	4	440
Gonorrhoea	5,087	1,667	2,380	656	769	578	478	503	12,118
Rabies:									
Heads examined	76	10	1	13	.....	.....	.....	.....	100
Milk:									
Local municipal supply	.....	2,088	1,406	119	9	347	142	368	4,489
Outside supplies	983	595	49	55	64	275	521	102	2,644
Water:									
Local municipal supply	.....	376	2,389	314	2	597	758	2,166	6,602
Outside supplies	4,776	983	1,376	447	1,742	780	.....	609	10,713
Miscellaneous	621	888	92	456	133	172	24	437	2,823
(*b*) SEROLOGY									
Syphilis:									
Dark field	.....	.....	5	4	38	1	.....	.....	48
Wassermann test	25,246	8,292	5,498	2,496	1,106	.....	.....	.....	42,638
Kahn test	24,202	7,881	5,214	2,496	.....	.....	.....	.....	39,793
Colloidal gold test	700	373	118	.....	18	.....	.....	.....	1,209
(*c*) CHEMISTRY									
Blood sugars	2,344	43	70	104	26	39	12	85	2,723
Milk:									
Local municipal supply	.....	573	1,449	.....	2	385	73	485	2,967
Outside supplies	1,005	445	49	.....	66	297	513	178	2,553
Water:									
Local municipal supply	.....	12	4	.....	.....	.....	.....	4	20
Outside supplies	77	85	10	.....	.....	.....	.....	6	178
Coal samples:									
Calorific value	479	.....	.....	.....	.....	.....	.....	.....	479
Ash	479	.....	.....	.....	.....	.....	.....	.....	479
Moisture	565	.....	.....	.....	.....	.....	.....	.....	565
Volatile matter	41	.....	.....	.....	.....	.....	.....	.....	41
Liquors:									
Alcohol	1,213	.....	.....	.....	.....	.....	.....	.....	1,213
Medicinal ingredients	71	.....	.....	.....	.....	.....	.....	.....	71
Miscellaneous	374	69	1,194	.....	491	361	14	239	2,742
Total examinations	87,487	31,686	30,929	9,314	5,953	5,373	3,522	6,950	181,214

TABLE II

TABLE SHOWING THE TOTAL SPECIMENS EXAMINED AT ALL LABORATORIES DURING THE YEARS 1911, 1925, 1926, 1927, 1928

Laboratory at	1911	1925	1926	1927	1928
Toronto	5,720	69,607	61,312	77,357	87,487
London	.....	25,261	27,405	31,876	31,686
Ottawa	.....	13,669	21,818	26,227	30,929
Kingston	.....	7,651	7,353	9,078	9,314
Fort William	.....	5,499	6,165	6,427	5,953
Peterborough	.....	4,201	4,185	5,788	5,373
North Bay	.....	3,542	3,674	4,212	3,522
Sault Ste. Marie	.....	7,889	7,529	5,563	6,950
Total	5,720	137,319	139,441	166,528	181,214

TABLE III

TABLE SHOWING OUTFITS, VACCINES AND CHEMICAL PRODUCTS PREPARED AND DISTRIBUTED FROM THE MAIN LABORATORY DURING THE YEARS 1925, 1926, 1927, 1928

Outfits sent out	1925	1926	1927	1928
Bacterial—water	3,578	2,518	4,430	5,290
Diphtheria	15,611	9,691	14,204	17,440
Typhoid	2,197	2,551	3,723	4,015
Tuberculosis	6,216	6,230	8,688	9,879
Wassermann	41,455	31,770	32,368	41,721
Gonorrhoea	4,142	7,125	8,513	11,041
Blood sugar	1,429	2,090	3,823	4,414
Faeces	212	376	513	833
Miscellaneous	.....	.....	256	612
Total	78,840	62,351	76,518	95,245
VACCINES AND CHEMICAL PRODUCTS				
Typhoid monovalent vaccine, cc	17,750	21,700	32,450	23,710
Typhoid paratyphoid vaccine, cc	12,940	23,120	42,910	43,750
Whooping-cough vaccine, cc	61,890	65,370	71,120	80,200
Silver nitrate for prevention of ophthalmia, ampoules	29,470	29,135	35,314	38,214
Bismuth hydrate	6,556	22,858	22,922	35,458
Mercury salicylate	12,892	11,217	10,721	15,155
Sodium hydroxide in the treatment of V.D.S.	.....	2,414	2,492	2,787
Distilled water in the treatment of V.D.S.	.....	20,677	21,812	30,050

DIVISION OF PUBLIC HEALTH EDUCATION

M. Power, B.A., Director

Health Pamphlets

During the year health pamphlets were issued and distributed as follows:

Food and Nutrition	(reprint)	5,000	copies
Rabies	"	5,000	"
Resuscitation		5,000	"
Country Home and Summer Cottage		5,000	"
Health Almanac		20,000	"
Baby Books		10,000	"
Communicable Disease Pamphlets		14,000	"
Dental Pamphlet ("The Mouth")		10,000	"

Bulletin No. 9, on rural and semi-urban sanitation, is being revised, as the old edition was exhausted.

Ontario Health Officers' Association

The Fourteenth Annual Meeting of the Ontario Health Officers' Association was held at the University of Toronto, June 12th, 13th and 14th, with a total attendance of 278. The programme was so arranged that more time was available for discussion, and the morning of the third day was reserved for a Round Table Conference on questions relative to public health administration. The programme was as follows:

Programme

Ontario Health Officers' Association

Toronto, June 12th, 13th and 14th, 1928

Tuesday, June 12th

Room 43, Physics Building

10.00 a.m.—Registration.

11.00 a.m.—"The Public Health Act"—W. J. Bell, M.B., Deputy Minister of Health.

2.00 p.m.—Address—Honourable Forbes Godfrey, M.D., Minister of Health.

2.20 p.m.—President's Address—W. J. Cook, M.B., M.O.H., Sudbury.

3.00 p.m.—Address—W. H. Frost, M.D., Professor of Epidemiology, School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Md.

WEDNESDAY, JUNE 13TH—FORENOON

Room 43, Physics Building

9.30 a.m.—"Comparative Cost of Public Health Services in Municipalities of 10,000 to 35,000"—T. W. G. McKay, M.D., M.O.H., Oshawa.

10.15 a.m.—"Unnecessary Morbidity in Adults"—J. G. Cunningham, M.B., Director Division of Industrial Hygiene, Provincial Department of Health.

11.00 a.m.—"Focal Infection, with special reference to Dental Infection and Mouth Sepsis"—Dr. W. L. Holman, Department of Pathology and Bacteriology, University of Toronto.

11.00 a.m.—"The Contribution of the Dental Profession to the Medical Officer's Programme"—Arthur W. Ellis, D.D.S.

WEDNESDAY, JUNE 13TH—AFTERNOON

Room 43, Physics Building

2.00 p.m.—"Safeguarding the Milk Supply"—A. E. Berry, M.A. Sc., C.E, Ph.D., Director, Division of Sanitary Engineering, Provincial Department of Health

3.00 p.m.—"The Newer Biological Products, Their Preparation and Uses"—R. D. Defries, M.D., D.P.H., Associate Director School of Hygiene and Connaught Laboratories.

THURSDAY, JUNE 14TH

Room 22, Mining Building

Thursday morning beginning at 10 o'clock will be devoted to a Round Table on questions and answers relative to public health administration.

East Block, Parliament Buildings

On Thursday afternoon the staff of the Department of Health will be available in the new offices, East Block, Parliament Buildings (5th floor) for interviews with the members of the Ontario Health Officers' Association.

A communication from the Canadian Public Health Association was read, extending the privilege of full membership to every member in good standing of the O.H.O.A. The same was accepted, and the Secretary instructed to notify the C.P.H.A. of this action.

The Standing Committee on "The Medical Care of Indigents in Unorganized Territory," under the chairmanship of Dr. A. S. Thompson, M.O.H., Havelock, appointed at the 1927 meeting, brought in the following report, which was accepted as read:

Mr. President and Gentlemen:

Your Committee, appointed last year to bring in a report on the Medical Care of Indigents in Unorganized Territory, begs leave to present the following:

While this question is not entirely new, of recent years its importance has been greatly increased through the activities of the Provincial Government in stimulating the settlement of Northern Ontario. One important fact bearing on this question must be borne in mind, viz., that these settlers flocking into Northern Ontario are for the most part very poor, and must make their living by their labour, out of the land and the forest from the first. Late in the fall many of these indigent settlers recognizing their lack of protection against starvation and sickness, move into the organized towns and villages and promptly become a burden on these municipalities for food, fuel, clothing, and medical attention. Those who do not move into town, when in distress from lack of food, clothing, etc., or become sick or in need of medical care, make a large demand on the charity of the neighbouring organized municipalities. These municipalities are strongly protesting against this imposition, and demand that the Provincial Government provide a solution of this problem.

In Northern Ontario there are hundreds of townships being opened up for settlement, containing splendid fertile soil; but the settler must go through from six to ten years of hardships and privation before he becomes self-sustaining. In the meanwhile should any need of medical care arise, long distances over bad roads, and poverty of the settler lend themselves to procrastination or utter neglect. This lack of medical attention is the cause of high mortality rates among these poor people and bears with especial severity on the women and little children.

Another matter closely associated with the above is that of indigent tramps or transients who have to be looked after; the municipality in which they may happen to be is saddled with the care of this class, over whom they have no control.

It is of the utmost importance that the Provincial Government should assume the same responsibility for the indigent settler (whom their officials induced to take these lands) as the organized municipality now bear for the indigents within their boundaries.

When it is pointed out that there are some twenty-five Crown Land Agents in Northern Ontario whose duty it is to find settlers for the lands of unorganized townships, the suggestion of government responsibility for indigents in them on the same basis as now exists in organized municipalities requires no argument to endorse it as being the only just and correct solution of this problem.

A. S. Thomson,
Chairman.

The following officers were elected for the ensuing year:

President, Dr. W. E. George, District Officer of Health, North Bay.

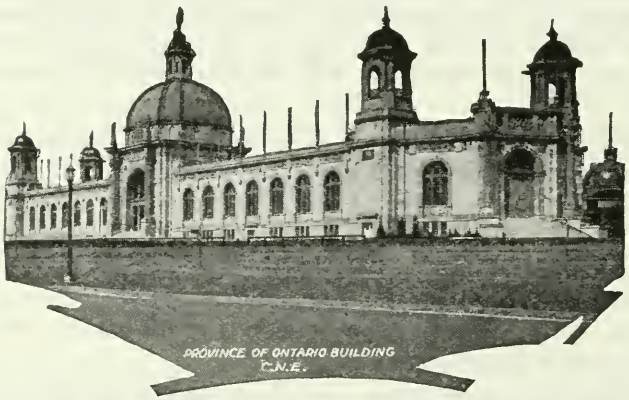
1st Vice-President: Dr. W. L. Hutton, Medical Officer of Health, Brantford.

2nd Vice-President: Dr. Gustave Lacasse, Medical Officer of Health, Tecumseh.

Health Exhibits

Small exhibits were shown in the following centres, viz.:

Guelph, Ontario Agricultural College, Macdonald Institute.
Hamilton, Produced-in-Canada Exhibit.
Brantford, Produced-in-Canada Exhibit.
Brockville, Fall Fair.
Sault Ste. Marie, Fall Fair.
Goderich, Fall Fair.
Ingersoll, Fall Fair.
Cooksville, Fall Fair.
Picton, Fall Fair.
Peterborough, Kiwanis Club Fair.
Picton, Kiwanis Club Fair.
Orillia, Fall Fair.
Belleville, Women's Institute.



The Ontario Government Building—Canadian National Exhibition, Toronto, is of Queenston limestone and reinforced concrete; it is triangular in shape (420 ft. to a side); the angle towers and central dome give a note of striking architectural beauty.

Canadian National Exhibition, Toronto

While 1928 saw the Canadian National Exhibition celebrate its Golden Jubilee, it also marked the eighteenth anniversary of our Public Health Exhibit, the first efforts along the line of health education of the public in that setting having been staged in 1911. From that year until 1925 the Provincial Board of Health, afterwards called the Department of Health, was given space in the various sections allocated to Government purposes. The importance of the Health Exhibit increased with the years, and upon completion of the Ontario Government Building in 1926, designed to house the exhibits of the various Provincial Departments, we were assigned the western half of the main wing, a total length of 250 feet, divided by a centre aisle 14 feet in width.

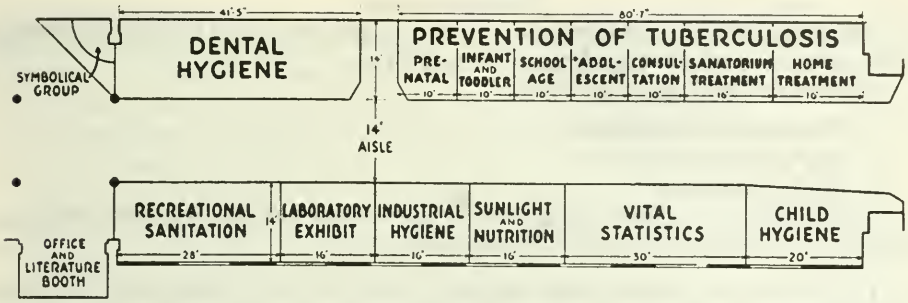


Diagram Showing Lay-out of the Public Health Exhibit.

It has been the policy during recent years to give special emphasis to one phase of health activity each year in the exhibit at the Canadian National Exhibition, and 1928 was chosen for a special showing on tuberculosis. Whereas public health authorities are interested in the treatment of the disease and the provision of facilities for same, prevention is their special field and the tuberculosis contact is the health worker's special responsibility.

Section on Childhood Infection—The centre drawing in the section on childhood infection shows a ship symbolic of childhood passing through the channel of child life; the channel is marked by buoys carrying flags emblematic of health hazards to be avoided.

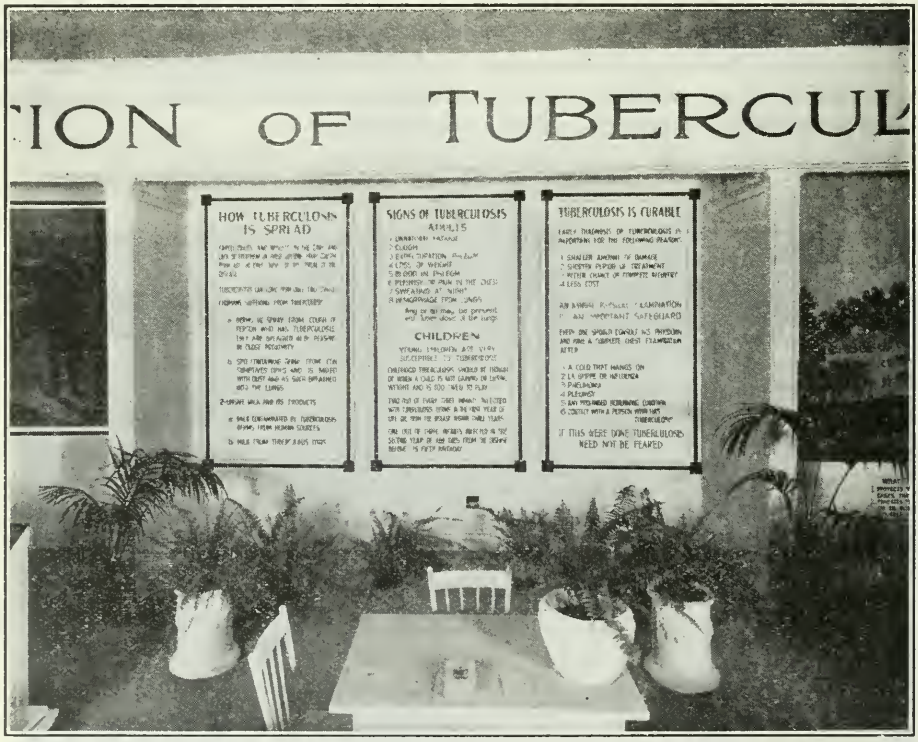
Tuberculosis

The scope of the exhibit extended from the prevention of childhood infection to the treatment of advanced cases in sanatoria.

Particular emphasis was laid on:

1. Prevention of infection.
2. Early diagnosis.
3. Early treatment.
4. Avoidance of such irregularity as would lead to lowered physique, owered resistance and increased susceptibility.

The section on tuberculosis (80 feet) consisted of a background of panels 9 feet in height, capped by a frieze along the entire length reading "Prevention of Tuberculosis," flanked at either end by the Provincial crest and double red cross, while in the foreground a series of photographs showed the practical application of the teaching outlined on the panels.

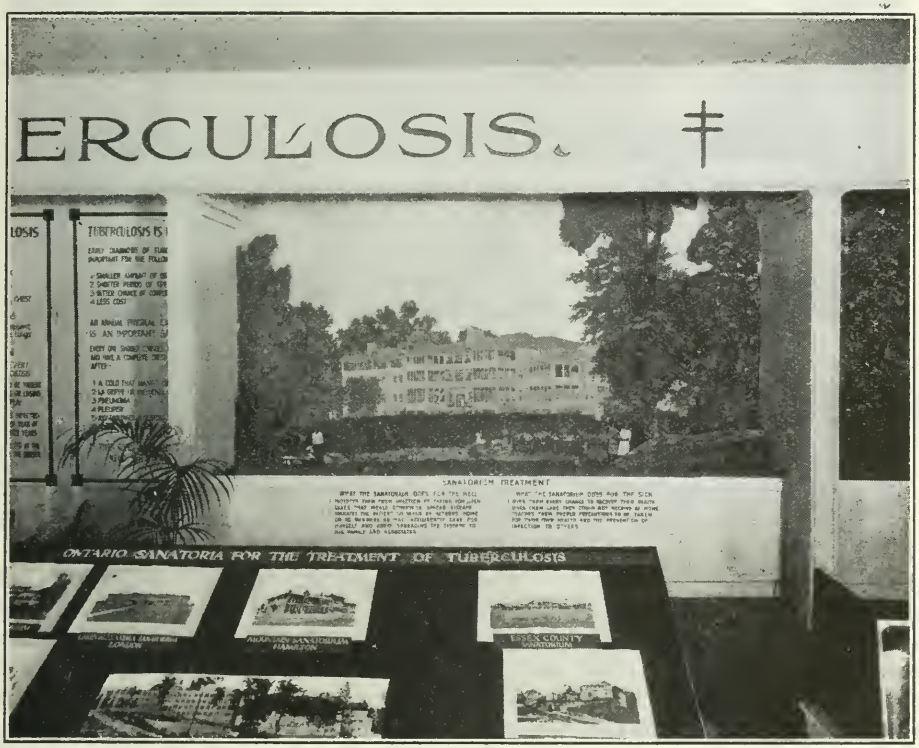


Consultation Desk—Tuberculosis Exhibit—where a clinician or a nurse was in constant attendance every day from 10 a.m. to 10 p.m. The panels behind the table briefly outline the salient points in the control of tuberculosis. These were explained as opportunity offered.

The subsection on childhood tuberculosis created a great deal of interest. The oil panels in Walker Drayton's vigorous style and the photographs of the children's activities in various Ontario preventoria were most attractive, while the lesson that tuberculosis in childhood is caused only by (1) exposure to open cases or (2) infected milk, was vividly driven home. Clear-cut photographic enlargements illustrative of glandular and bone tuberculosis showed the results of such infection.

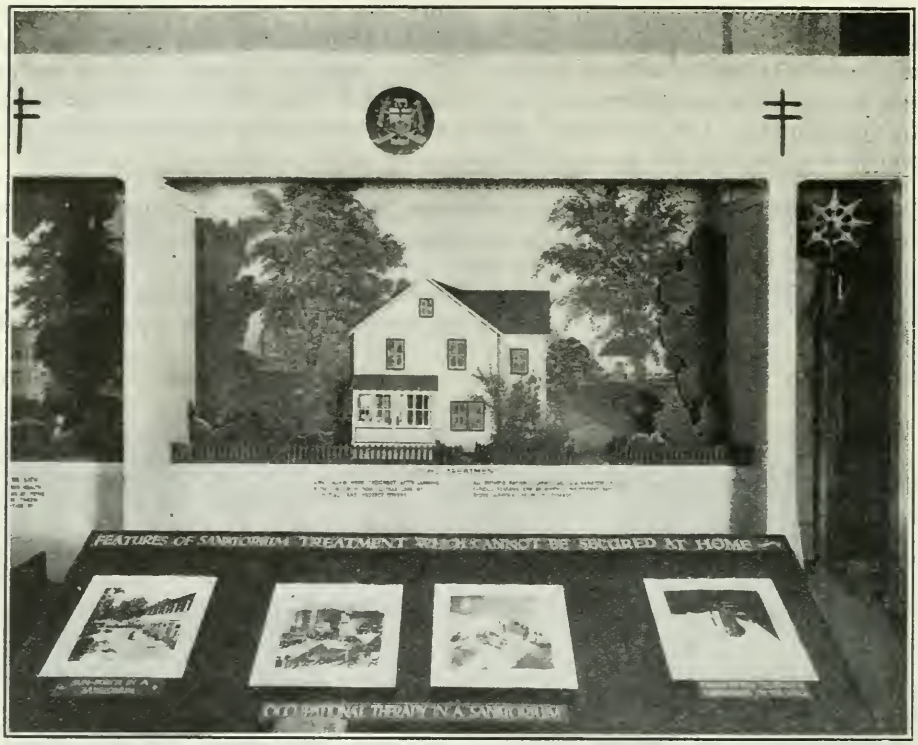
Because adolescence and early adult life are periods requiring special attention to health by way of building a firm foundation, they were given due emphasis. A display fixture showed X-ray negatives illustrating: a normal lung, a lung showing tuberculous infection, and a lung showing a healed lesion. A physician from the staff or a nurse was present during the day and evening to answer questions and give out literature on tuberculosis.

The *treatment of tuberculosis* was shown by two panels in large proportions portraying: (*a*) sanatorium care, in front of which were displayed enlarged photographs of the various Ontario institutions; (*b*) home care, by a miniature typical home in a town or country district with sleeping-porch and cut-out furniture to demonstrate how simple a matter it is to secure for a patient proper accommodation at small expense.



Sanatorium Treatment—what it does for the well and what it does for the sick—is outlined on the panel background. Photographic enlargements of Ontario sanatoria are shown on a table covered with green baize. The table is tilted, the back edges being 10" higher than the front.

Comments received from visiting physicians, health workers and others were very favourable, and already a number of requests have been received for the exhibit to be shown in Ontario centres. It is designed for easy transportation, and the various sections are complete in themselves. The artistic handling of the background has received very favourable criticism, and we are glad to give due credit to the designer, Mr. R. G. Collins, artist decorator, of Toronto.



The panel on Home Treatment was designed to demonstrate the low cost of a simple arrangement for proper accommodation for a patient taking treatment at home. Pictures illustrative of occupational therapy and administration of thorocoplasty treatment were shown to emphasize that home care does not permit of certain features of sanatorium treatment.

Child Hygiene

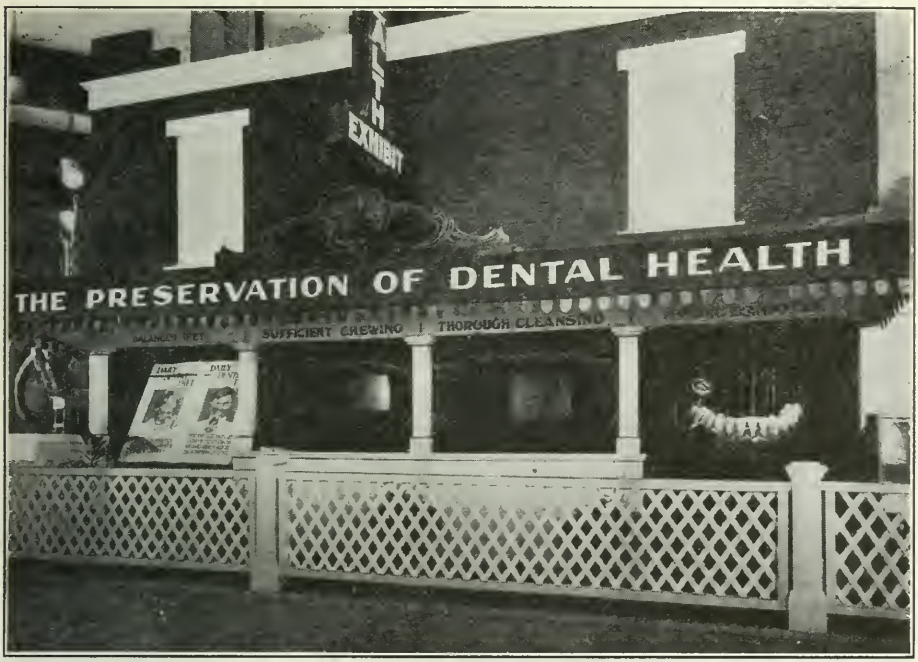
School health service was the activity chosen by the Division of Child Hygiene as their subject, and they handled it in a very dignified way. Life-size photographic cut-outs in sepia were used to contrast the *old way* of neglect in the care of the individual child and the careless manner of managing sanitary matters in the school environment, with the *new order* under which every effort is made to give the child the maximum of health by means of periodic examination, frequent follow-up, correction of defects, and perfect sanitation of the school plant. "A worth-while School Health Service is the logical protective measure at the disposal of the community" was one of the slogans, and a map of the Province in colours was prepared to show the extent of school health service of various types throughout the Province.

Mouth Health

The display of the Division of Dental Services took the form of a dental health educational exhibit and clinic for examination and advice. The clinic was organized on a plan whereby the Ontario Dental Association, Royal College

of Dental Surgeons and Faculty of Dentistry of the University of Toronto co-operated with the Department. Free mouth examination (including X-ray pictures when indicated), advice and instruction were given to all who requested same. In all, 800 patients visited the clinic, and radiographs were taken for about 700.

The educational section of the exhibit set forth the programme for the maintenance of mouth health. A large model emphasized the necessity for



The Mouth Health Exhibit—Educational Section—This illustration shows the Educational section of the Mouth Health Exhibit. The clinic was located in the space to the right with partitions painted white and glass windows; a waiting room was designed to accommodate ten patients; the necessary facilities for photographing and developing X-rays were included in the equipment.

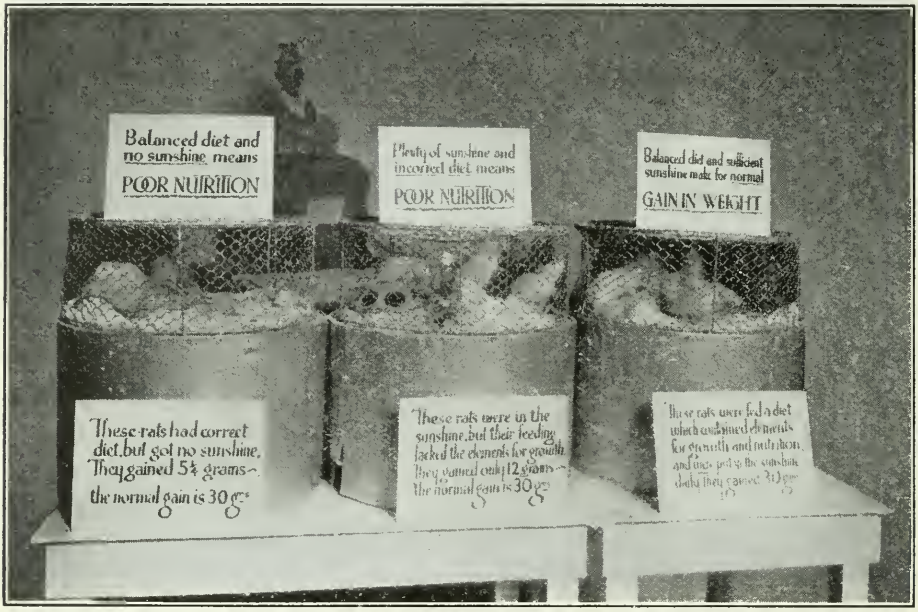
periodic examination; the motion picture film showed how to brush the teeth; the film slide stressed the value of proper mastication; and the book told the story of proper nutrition and a balanced diet.

Nutrition

Child health has been the subject of much discussion during the last decade, and one hour spent in the exhibit would be sufficient to convince any health worker that the lesson has gone over. The tragic figure of death slaying the innocents was necessary ten years ago to stir public opinion to action to "save the babies." Mothers, to-day, are applying the teaching they have learned in infant care campaigns and are bringing their babies through the critical first

year; they are also seeking instruction which will ensure a maximum of health for the child throughout its toddler, pre-school and school age periods.

To present some of the essentials, the Division made an attempt to demonstrate important points brought out by recent research into the effect of sunlight and proper diet on development. The Laboratory supplied three groups of white rats: (1) fed on a proper diet and exposed to sufficient amount of direct sunlight; (2) fed on a proper diet but given very little exposure to direct sunlight; (3) fed on rachitic diet but exposed to sufficient direct sunlight. The fact that No. (3) group made a greater gain in weight than (2) made the parents ask "Why?" and kept the nurse very busy answering questions.


Balanced diet and no sunshine means POOR NUTRITION
Plenty of sunshine and incorrect diet means POOR NUTRITION
Balanced diet and sufficient sunshine make for normal GAIN IN WEIGHT
These rats had correct diet, but got no sunshine. They gained 5½ grams— the normal gain is 30 gms
These rats were in the sunshine, but their feeding lacked the elements for growth. They gained only 12 grams— the normal gain is 30 gms

Section of Exhibit on Nutrition.

A small play-yard with sand pile was inhabited by wee tots in sun-suits, while the nurse demonstrated on the doll baby in the pram close-by the correct way to give an infant his daily sun bath.

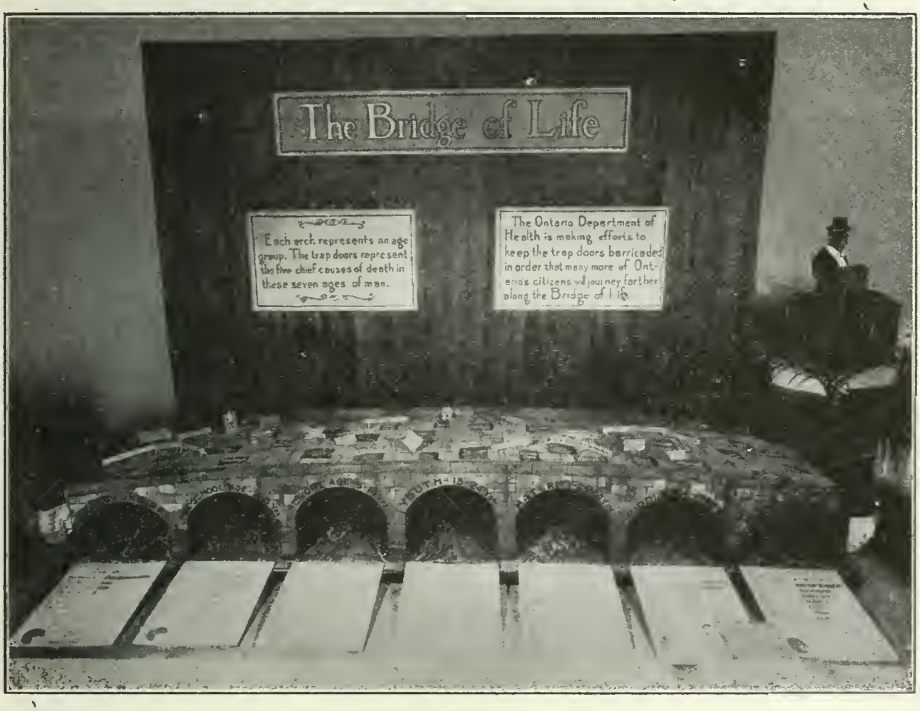
"Food and Nutrition" and "Suggestions for Feeding School-age Children" were given upon request to those interested.

Vital Statistics

Technically, statistics are regarded as the keystone in public health, but to present them for popular interpretation causes the statistician much concern. The Director of the Division of Vital Statistics struck upon the happy plan of using the "Vision of Mirza" as the theme of this year's presentation. The "Bridge of Life" was made up of spans representing the various age groups; trap-doors were labelled with names of the chief causes of death; barriers and miniature traffic signals carried slogans urging prevention and specific control measures.

Immediately in front of each arch a bar diagram showed graphically the death rates for the diseases causing the highest number of deaths within the respective groups.

The reception accorded "The Bridge" was beyond expectation. The general public gave it their intelligent consideration, while physicians invariably made notes for future reference. Health workers from other provinces and the United States made sketches on the spot, and we have had many requests from governmental and volunteer agencies for notes and specifications of the model.


The Bridge of Life
Each arch represents an age group. The trap doors represent the five chief causes of death in these seven ages of man.
The Ontario Department of Health is making efforts to keep the trap doors barricaded in order that many more of Ontario's citizens will journey farther along the Bridge of Life

"The Bridge of Life" told the story of Ontario's death rates by causes and age, while the diagrams listed the chief diseases for the respective groups.

The Division removed the birth registration cards for certain years to the exhibit and made searches upon application, while a display fixture in the form of an automatic book told the story of how the Department handles the seven million records of births, marriages and deaths on file since 1869.

Laboratories

The Division of Laboratories singled out rabies for special emphasis, and prepared a map of the Province showing the distribution of animal cases from which specimens had been sent in for examination; this was surmounted by a large photograph of a collie dog. A new edition of the Rabies pamphlet was prepared and distributed.

A glass show case contained a display of biological products supplied free by the Department for the prevention and control of communicable diseases, while diagnostic outfits, apparatus for milk and water examination, etc., were set up.

Sanitary Engineering

Recreational sanitation is much to the fore in Ontario at the present time, and the Division of Sanitary Engineering prepared a miniature swimming-pool to illustrate the cardinal points of a healthy holiday. An attractive poster on resuscitation occupied a prominent place, and several thousand copies of the leaflet were distributed from the booth.

The home pasteurization of milk, when it is not possible to secure the commercial article, was shown in a house representing a country home or summer cottage.

Safety is the first consideration for a holiday—safe water, safe milk, safe bathing. This was the theme of the exhibit of the Division of Sanitary Engineering.

Samples of the Department's chlorine outfit for home treatment of water were displayed, and information given in regard to this item of service which consists of the Department supplying at cost (60c.) two bottles containing sufficient material for (*a*) detection of pollution, and (*b*) correction of same to take care of the drinking water supply of an ordinary family for the summer camping season. This is of invaluable assistance to the directors of fresh air camps, recreational groups, as also to the householder who is doubtful of his drinking water, whether in town or country.

Industrial Hygiene

Economic loss in industry due to neglect or improper care of minor wounds is so enormous and so unnecessary that the Division of Industrial Hygiene attempted to graphically illustrate the simplicity and low cost involved in the proper handling of the minor accident.

Photographic studies were made in actual plants, and an exhibit prepared in a series of contrasts. One illustrates the careful employee reporting to the first-aid office and receiving proper first-aid treatment—result: little or no time lost, full pay envelope and no permanent disability nor fatal termination; the other portrays a similar accident treated with contempt—result: loss of time, unsuccessful attempt to save a limb, finally death with resultant anxiety and reduced circumstances for the worker's dependants.

Conclusion

While it would give us considerable satisfaction to definitely report the total number of persons viewing the exhibit during the fourteen days of the Exhibition, this is not possible, but the total attendance was well over two million, and we are correct in stating that a very large percentage visited our booths. Even to the most casual observer, it was evident that health rivalled the more blatantly advertised attractions of the "Big Fair." We can only say that the Health Exhibit has become a fixture, and people visit and revisit us from year to year seeking new ideas in health. If requesting literature is a criterion, the 1928 exhibit was a huge success; approximately fifty thousand pamphlets were given to visitors or mailed to their friends, the distribution including every province in Canada, the British West Indies, and twenty States of the Union.

Health Films

The moving pictures of the Division have been shown in twenty-four centres, of which a list is given below, showing the auspices and total attendance in each place.

Date	Place	Auspices	Attend-ance, Adults	Children
1927				
Nov. 17	Thorndale	Department of Health	150	300
" 21, 23	Windsor-Walkerville	Technical School	.....	700
1928				
Feb. 1	Aylmer	Department of Health	200	300
" 2	London	" "	.....	500
" 6	Silverthorn	Canadian Legion	100	300
" 15	East York	Department of Health	.....	500
Mch. 20	Binbrook	" "	150	100
" 21	Ancaster	" "	100	100
" 22	Mt. Hamilton	" "	75	150
April 21	Toronto	Laennec Society	100	.....
" 27	Goderich	Department of Health	.....	500
May 8	Port Credit	Mrs. Parsons	.....	200
" 10	Caledon	Department of Health	50	200
" 16	Kapuskasing	" "	.....	300
June 2	Birchcliff	" "	50	250
July 4, 5, 6	Aylmer	" "	300	400
Sept. 15	King George School	" "	.....	250
" 15	George Syme School	" "	.....	250
" 21	Humbercrest School	" "	.....	300
" 28	Lambton Park School	" "	.....	150
" 29	Humber School	" "	.....	100
Nov. 7	Humbercrest School	Dr. E. Guest	.....	200
" 8	Stratford	Department of Health	.....	1,200
" 21, 22	Windsor-Walkerville	Technical School	.....	800

DIVISION OF NURSE REGISTRATION

A. M. Munn, Reg. N., Director

The work of this Division was organized primarily to set a standard of registration for nurses graduating from the various hospitals of the Province, and to improve living and teaching conditions generally.

The Nurse Registration Branch was transferred from the Department of the Provincial Secretary to the Department of Health in 1924, when a Council of Nurse Education was appointed as provided for in the regulations arising out of the Act of 1922. This Council is composed of seven members, three of such members being nurses recommended by the Registered Nurses' Association of Ontario, two physicians, the Inspector of Hospitals and the Inspector of Training Schools.

Regulations for the Conduct of Training Schools and a Minimum Curriculum were printed and issued to the Training Schools in 1925 for the guidance of those engaged in teaching and lecturing to nurses in training. Standard Training School record forms were also drafted and issued to the Training Schools so that there would be uniformity in record-keeping.

Since 1926 Provincial examinations have been held twice yearly at various points throughout the Province and where distances are great an effort has been made to place these centres as conveniently as possible.

An Examining Board composed of the Chairman and seven members, all of whom are actively engaged in the teaching of nurses, has been selected by the Council and approved by the Honourable the Minister of Health, to prepare questions for the examination papers. This Board is also responsible for the marking of all written papers following the examination and when the work is finished all failure papers are referred to the Council of Nurse Education when a final decision is made regarding the eligility of the student for registration after all failure papers have been re-read.

In addition to the details of the Provincial examinations the office of the Inspector of Training Schools deals with all applications for registration from other provinces and States, and also arranges affiliated courses for such hospitals as require general or special experience for their students so that they may qualify for Provincial standing.

During 1928 visits of inspection were made to fifty Training Schools. There is a decided improvement in living and teaching conditions for nurses since the initial survey of 1923. Thirty hospitals have improved their residence accommodation and plans are being made by additional hospitals for better accommodation this year. With the building of new homes, better facilities for class and demonstration room space have been provided.

If a nurse in training is to teach health to her patient, and later to the community, she must bring to her work a sound body and a well-trained mind. Giving as she does three years of her youth and energy to the hospital, she has a right to demand in return good teaching, a cheerful, home-like atmosphere, and living conditions under which the principles of personal hygiene can be taught and applied. In spite of arguments to the contrary, the call to service is

still heard by the young women of to-day, and a desire to help those who cannot help themselves is still alive, but there are many fields open and each has its various attractions. It is only right that the student therefore should demand that her three years in training will truly prepare her to meet her obligations as a health educator whether this be in private duty, in industrial work, a teacher or executive in a training school, or any other field of nursing activity.

The lack of properly trained nurse instructors will now be met, as under the Extension Department of the University of Toronto a course is available, and the initial enrolment of twenty-one students should provide some of the hospitals of the Province with qualified teachers.

In retrospect one feels that there is reason to feel gratified with the progress which has been made in Ontario during the last five years in spite of the fact that ours was the last Province of the Dominion to adopt registration regulations, or any definite standard for the training of nurses.

STATEMENT OF REGISTRANTS AND REVENUE, 1928

Total number registered in the Province (since 1923)	11,569
" " " " " during 1928	1,060
" " taking Provincial examination, 1928	1,024
Re-registration fees, 1928	$6,199 00
Total revenue, 1928	17,043 69

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN

NOVEMBER 1ST, 1927, TO OCTOBER 31ST, 1928

Month	Smallpox Vaccine Points	Cost	Diphtheria Antitoxin					
			1-M and 5-M Units	Cost	10-M, 20-M and 40-M Units	Cost	Syringes	Cost
November	66,001	$2,970 04	5,139–M	$719 46	38,490–M	$4,618 80	1,340	$268 00
December	75,843	3,412 93	5,107–M	714 98	29,800–M	3,576 00	1,163	232 60
January	49,611	2,232 49	5,389–M	754 46	34,270–M	4,112 40	1,341	268 20
February	19,059	857 65	2,106–M	294 84	22,240–M	2,668 80	606	121 20
March	14,526	653 67	2,418–M	338 52	17,160–M	2,059 20	479	95 80
April	9,613	432 58	1,164–M	162 96	11,700–M	1,404 00	230	46 00
May	10,481	471 65	2,727–M	381 78	17,450–M	2,094 00	837	167 40
June	8,867	399 01	2,107–M	294 98	18,200–M	2,184 00	674	134 80
July	8,267	372 01	2,113–M	295 82	7,200–M	864 00	148	29 60
August	9,960	448 20	1,562–M	218 68	13,160–M	1,579 20	492	98 40
September	12,769	574 60	4,506–M	630 84	17,310–M	2,077 20	272	54 40
October	19,709	886 90	4,095–M	573 30	23,240–M	2,788 80	717	143 40
Totals	304,706	$13,711 73	38,433–M	$5,380 62	250,220–M	$30,026 40	8,299	$1,659 80

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—*Continued*

NOVEMBER 1ST, 1927, TO OCTOBER 31ST, 1928

Month	Schick Test Outfits	Cost	Diphtheria Toxoid						Dick Test Outfits	Cost
			Individual Vial	Cost	6 Individual Vials	Cost	12 Individual Vials	Cost		
November	474	$94 80	1,433	$286 60	462	$369 60	1,199	$1,199 00	398	$79 60
December	152	30 40	1,097	219 40	238	190 40	276	276 00	429	85 80
January	198	39 60	1,224	244 80	466	372 80	948	948 00	439	87 80
February	158	31 60	872	174 40	375	300 00	153	153 00	363	72 60
March	207	41 40	700	140 00	282	225 60	613	613 00	327	65 40
April	201	40 20	499	99 80	250	200 00	611	611 00	250	50 00
May	151	30 20	610	122 00	424	339 20	235	235 00	260	52 00
June	113	22 60	331	66 20	158	126 40	203	203 00	193	38 60
July	46	9 20	200	40 00	45	36 00	87	87 00	211	42 20
August	127	25 40	330	66 00	148	118 40	40	40 00	195	39 00
September	451	90 20	587	116 40	242	193 60	375	375 00	251	50 20
October	180	36 00	567	113 40	206	164 80	870	870 00	199	39 80
Totals	2,458	$491 60	8,445	$1,689 00	3,296	$2,636 80	5,610	$5,610 00	3,515	$703 00

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—*Continued*

NOVEMBER 1ST, 1927, TO OCTOBER 31ST, 1928

Month	Scarlet Fever Antitoxin				Scarlet Fever Toxin					
	2 cc. Vials	Cost	15 cc. Vials	Cost	Syringes	Cost	Individual Vials	Cost	For 6 Persons	Cost
November	1,123	$449 20	983	$2,211 75	5	$1 00	725	$217 50	356	$356 00
December	1,030	412 00	890	2,002 50	12	2 40	463	138 90	154	154 00
January	799	319 06	738	1,660 50	5	1 00	493	147 90	176	176 00
February	765	306 00	841	1,892 25	20	4 00	389	116 70	229	229 00
March	879	351 60	862	1,939 50	.....	.....	384	115 20	105	105 00
April	636	254 40	832	1,872 00	18	3 60	150	45 00	61	61 00
May	587	234 80	827	1,860 75	23	4 60	298	89 40	44	44 00
June	463	185 20	386	868 50	.....	.....	203	60 90	95	95 00
July	231	92 40	157	353 25	30	6 00	148	44 40	47	47 00
August	447	178 80	279	627 75	6	1 20	116	34 80	34	34 00
September	474	189 60	390	877 50	.....	.....	206	61 80	130	130 00
October	612	244 80	538	1,210 50	14	2 80	354	106 20	171	171 00
Totals	8,046	$3,218 40	7,723	$17,376 75	133	$26 60	3,929	$1,178 70	1,602	$1,602 00

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—*Continued*

NOVEMBER 1ST, 1927, TO OCTOBER 31ST, 1928

Month	Meningitis Serum				Tetanus Antitoxin					
	20 cc. Vials	Cost	Intra-spinal Outfits	Cost	Units	Cost	Syringes	Cost	Outfits	Cost
November	60	$60 00	6	$2 70	2,752,500	$825 75	165	$33 00	16	$7 20
December	90	90 00	10	4 50	1,817,000	545 10	2	40	4	1 80
January	123	123 00	17	7 65	1,897,500	569 25	90	18 00	12	5 40
February	74	74 00	17	7 65	1,224,000	367 20	50	10 00	6	2 70
March	130	130 00	12	5 40	2,128,000	638 40	110	22 00	9	4 05
April	119	119 00	17	7 65	1,096,000	328 80	117	23 40	.....	.....
May	221	221 00	31	13 95	3,140,500	942 15	112	22 40	22	9 90
June	183	183 00	33	14 85	3,665,000	1,099 50	112	22 40	16	7 20
July	117	117 00	10	4 50	4,593,000	1,377 90	12	2 40	28	12 60
August	117	117 00	13	5 85	4,574,000	1,372 20	105	21 00	6	2 70
September	190	190 00	8	3 60	4,287,000	1,286 10	131	26 20	18	8 10
October	122	122 00	18	8 10	3,650,000	1,095 00	139	27 80	20	9 00
Totals	1,546	1,546 00	192	$86 40	34,824,500	$10,447 35	1,145	$229 00	157	$70 65

STATEMENT OF BIOLOGICAL PRODUCTS AND INSULIN—*Continued*

NOVEMBER 1ST, 1927, TO OCTOBER 31ST, 1928

Month	Rabies Vaccine				Total Cost	Insulin		Summary	Cost
	Treatments	Cost	Syringes	Cost		Units	Cost		
November	11	$140 00	24	$4 80	$14,914 80	788,000	$3,152 00	Biological products	$100,503 90
December	13	136 50			12,226 61	1,219,000	4,876 00	Syringe containers	1,928 20
January	17[1]	183 75			12,272 60	771,300	3,085 20		$102,432 10
February	11	115 50			7,799 09	1,092,100	4,368 20	Revenue from containers	1,783 20
March	50	525 00			8,068 74	940,000	3,760 00		$100,648 90
April	93	976 50			6,737 89	1,125,500	4,502 00	Insulin	48,943 60
May	36	378 00			7,714 18	957,700	3,830 80	Net cost	$149,592 50
June	22[1]	236 25	20	4 00	6,246 39	1,066,100	4,264 40		
July	49	514 50	10	2 00	4,349 78	1,188,900	4,755 60		
August	56	588 00	10	2 00	5,618 58	1,052,600	4,210 40		
September	34	357 00			7,292 34	1,232,400	4,929 60		
October	55	577 50			9,191 10	802,300	3,209 20		
Totals	448	$4,728 50	64	$12 80	$102,432 10	12,235,900	$48,943 60		

DISTRICT OFFICERS OF HEALTH

DISTRICT No. 1

T. J. McNally, D.O.H.

I have the honour to submit the sixteenth annual report for this district which comprises all the municipalities in the six southwestern counties of the Province of Ontario, having an estimated population of about half a million.

Health and sanitary conditions are governed locally by 122 Boards of Health, having 104 Medical Officers of Health as executive officers and of these two are full time.

These officers have all been visited officially except Pelee Island executive and most of them on several occasions during the year, as well as 119 special calls to deal with nuisances, communicable diseases, supervision of nursing demonstrations, addressing public meetings, etc.

In addition to this work about three weeks was spent on inspection of motor camps and highway booths in conjunction with Mr. Johnston of the engineering staff, necessitating altogether over 22,000 miles of travel by motor car in the supervision of public health work in the district.

Office work consisted of answering correspondence, making weekly and special reports, filling out financial statements, with car logs and filing copies of all the above. This gives in brief outline a summary of the year's work of your district officer.

I regret very much that because so much of my time has been occupied with details that could be quite as well handled by an engineer and stenographer attached to this office, much important public health work has necessarily been left undone.

Public Health Nursing

Six municipalities in the district now employ Public Health Nurses and in six others, School Nurses are utilized by the Boards of Education for supervision of the health of the pupils.

During the year one of your Public Health Nurses (Miss Pennock) was employed in the Town of Tecumseh and the Township of East Sandwich, introducing public health nursing and initiating a nurse employed by these municipalities. The uniting of these municipalities for this purpose was entirely due to the efforts of Senator Lacasse as Medical Officer of Health.

Mrs. Bagshaw gave a very effective demonstration of public health nursing in the Town of Aylmer, and during the latter part of the year has been engaged in a similar work in the Township of South Dorchester, and Miss Pennock has been occupied in a like capacity in North Gosfield, while Miss Howey has been recently assigned to the Township of Biddulph for a demonstration.

Milk

My comments in former reports on this food continue to apply to its supervision for domestic use because, while essentially necessary, it is potentially dangerous to health.

Rural Schools

The local Medical Officer's annual inspection of these institutions continues to improve their sanitary condition but in too many instances his advice is not acted upon by the school boards.

Communicable Diseases

Lack of uniformity by local officers in the quarantine of mumps, German measles, whooping cough and chickenpox is a serious handicap in public health administration.

Either the regulations should be changed or all local officers should be required to conform to the law.

Another difficulty, glaringly demonstrated during the present epidemic of influenza, is the failure of medical practitioners to report communicable diseases, other than those subject to quarantine. This remissness in such an epidemic makes it impossible for health officials or workers to know where assistance is required.

This failure to report is, with four or five exceptions in this district, just as glaring on the part of our part-time Medical Officers of Health who are practising their profession.

How can a district officer guard the public health against tuberculosis, venereal diseases, etc., when they are not reported?

Diphtheria

The use of toxoid as a protection against this disease is gradually, though all too slowly, being utilized by the public; credit is due to those practitioners who are urging their clientele to accept this protection, as well as to those medical officers who have arranged with their local Boards to have it administered free to all who will accept this treatment. The incidence of the disease in the district this year has not in any case assumed the proportions of an epidemic. I would suggest that each medical society be urged, through the Ontario Medical Association, by the Department to enlist the active co-operation of each of its members in making a united effort to have all children especially under ten years of age protected against this disease. There are two very good reasons why this should be done, first because it is this group which is especially susceptible to the disease and where most of the fatalities occur, and second because at this age there is no reaction from the treatment.

Venereal Diseases

The social diseases continue to make serious inroads on the public health of the community, to a large extent, because they are not reported, either as being treated or as having abandoned treatment, thus making it impossible for health authorities to exercise the necessary supervision for their control. It is but fair that note should be made of the large benefit being obtained through treatment by the Free Clinics established at different advantageous points. The care of those in penal institutions has also accomplished much good and is appreciated by most of those treated.

Typhoid Fever

It is a pleasure to report that the incidence of this disease in the district has been rare during the year and has appeared only in isolated cases. The potentially dangerous points outside of the unsolved milk supervision is from the water supplies of Courtright, Port Stanley, Tilbury, Petrolia, Aylmer and Woodstock.

Rabies

This disease has been gradually spreading from the first known case, at Harrow, which apparently was introduced from across the Border, until this year it has spread over the counties of Essex, Lambton and Kent, causing the loss of many valuable domestic animals and the life of one child. I have made every effort to use the measures of control now provided by law for its control, and have in most instances had the support of the local authorities, but of no avail; so that it is urgent that the Provincial law be so amended as to be effective for control and that quarantine should be established against further importations into the country.

Water Supply

Courtright supply is a serious menace, so that I advise the Department to take such action as may be required to safeguard the travelling public and tourist as well as the citizens of the village.

I am pleased to report that Glencoe has followed the advice of the Department, and has now in operation an abundant municipal supply of pure deep well water.

During the year I have frequently been urging upon the Mayor of Tilbury the necessity for a pure municipal water, and now have received his assurance that they will have one installed during 1929.

Motor Camps and Highway Booths

All motor camps in the district, seventy-three, were examined by Mr. Johnson, a Department Engineer, and your district officer, who gave approval certificates to twenty-four, as complying with the minimum regulations required by the Department.

We also made a survey of all the highway booths, 138, giving approval certificates to forty-six as complying with your standard requirements.

The better type of operators of these camps and booths are making some effort to reach your requirements, but there is not much improvement by the others, who, unfortunately, are in the majority. The conditions of these latter camps and booths must give a very poor impression of our people and country to the tourists as they call or pass along.

It is quite time that all should be required to attain the minimum standard set for the welfare of the tourists and in justice to those who are complying with the requirements as well as to those who are engaged in catering to the public all the year round in Standard Hotels.

During this survey ninety-six samples of water were collected from booths and camps; these samples were examined at the Institute of Public Health, London, and were classified as follows: twenty were "good"; nine, "fair"; six, "doubtful," and sixty-one "unsatisfactory." Most of these "unsatisfactory"

samples show "colon" in 1/10 or 1 c.c., so that they are potentially quite dangerous. This surely is sufficient reason for the Department to safeguard public health by requiring persons operating these businesses to have a license based on their minimum requirements.

Summer Resorts

Supervision of these resorts is a rather difficult problem, except where the municipality can be induced to appoint a full-time sanitary inspector for the holiday season.

It seems evident that if proper supervision is going to be exercised over the sanitary conditions of these communities, it will be necessary to have those operating them to register and allow only those to do so who provide reasonable sanitary accommodation for their patrons, and these conveniences under constant supervision. In conclusion permit me to express my appreciation of the cordial co-operation and assistance rendered by the Deputy Minister and Divisional heads and headquarters staff on all occasions when consulted regarding problems in the District.

DISTRICT No. 2

J. J. Fraser, D.O.H.

From year to year the activities of the Department have expanded and broadened, and every new work taken on has resulted in benefit to the people of the Province. In the way of constructive work for the future I beg to suggest the following: (1) The production and handling of milk be put under the Department of Health, not under the Department of Agriculture; milk is linked up with health in so many ways, infant hygiene, child welfare, communicable diseases, etc. (2) Motor camps be placed with the Department of Health and licensed, not under the Department of Highways. (3) Hospitals be placed under the care of Health instead of under the Provincial Secretary.

The Province of Quebec to the east, Manitoba on the west, and the State of New York on the south all have full-time health units. It is hoped the Province of Ontario will inaugurate this important step and by next year we can report a start having been made.

Communicable Diseases

It is a disappointment to find there has been no change in the regulations for minor communicable diseases. I have a great deal of sympathy for Medical Officers of Health who have worked hard for years, and with a good deal of success, to get their public to appreciate the value of quarantine. Then when an epidemic of mumps comes along they are asked to treat it just as seriously as an epidemic of diphtheria. Even more so, for while all contacts of a diphtheria case are to be quarantined for seven days, all contacts of a mumps case must be quarantined eighteen days.

Again, if a person gets German measles he is quarantined fourteen days, but if he just comes in contact with a case he is tied up for twenty-one days.

The argument is advanced that if the quarantine period for German measles is materially shortened all cases of measles will be called German measles. I do not believe that. Where one doctor would do so, ten would be honest in their diagnosis, and why penalize the ten honest men for one dishonest? Besides, the health officer knows the doctor in his municipality who will do this sort of thing and I think he would very soon check up on him.

Towards the end of the year a wide-spread epidemic of influenza occurred throughout the whole Province. The Department adopted prompt measures to combat it which had very beneficial results. Although the infection was not as severe as the last one, the fatalities were fewer from the experience then gained. The public has learned well the lesson, to go to bed at the first appearance of symptoms, and to stay there until all danger is past. If this lesson were as well remembered in every winter cold, undoubtedly many deaths from penumonia would be avoided.

New Diseases

There are two diseases that have come to the fore recently, undulant fever and tularemia. As man makes a slight gain in one direction against disease and death it seems as though some other danger must loom up and become an obstacle to worry him. Undulant fever is caused by the *Brucella abortus* in cattle. It is transmitted to man by drinking raw milk, and by direct contact with infected animals. Hence it is more to be looked for in rural communities and small towns.

To avoid it would seem simple, drink only pasteurized milk. But people will not do this so the condition must be attacked at its source. One of the first steps is to inform dairymen of the human health problem involved, both for themselves and for the ultimate milk consumer. They are already well enough aware of the economic problem that bovine infectious abortion involves, a powerful incentive to carry out the proper precautions for protecting their herds.

Tularemia has not yet been recognized in Ontario, but has occurred in the northern States along the Border, so it is just a matter of time when we will have it here. The source of infection is largely the wild rabbit, from which man contracts the disease either in skinning it or preparing it for the table. If one must eat wild rabbit he should wear rubber gloves while dressing it. It should be advised that the rabbit, which has been killed with a stick or been caught by a dog, be allowed to remain where it lay, as in all probability it is a diseased animal.

While on the matter of new problems there is one which would seem to demand attention. One can scarcely sit in with a company of middle-aged men without someone bringing up the subject of diseases of the stomach, and at least two of them seem to have had an operation or are going to have one. The other day I listened to two men discussing the advantages and disadvantages of a gastro-enterostomy as compared with a pylorectomy.

It seems to me the way to attack this problem is to catch them young, but how I do not know. If the time spent in schools on music and art were devoted to a study of food values and the evils of abusing the alimentary canal it would be much more profitable. And who can enjoy music and art if they are thinking of their stomachs all the time.

Food Supplies

A branch of Good Food Products of London was to be opened at Seaforth. The company was requested to submit a plan of their waste disposal for approval. A large factory for the making of cereals at Ayr is a model of care and cleanliness.

From the time the grain comes off the cars until it is loaded in finished packages, the product is not touched by human hands. All food products seem to be carefully handled with the exception of meat supplies. County abattoirs would be one solution.

Milk continues to be a problem of prime importance. One can arouse interest in any community by a reference to the milk supply. Milk is a universal food, at the same time it is one of the best culture media for bacteria. How can a municipality set about to get a clean supply? First and foremost it should have a milk by-law passed by the council, this gives control of the supply. Then there should be inspection, especially at the producing end, right through to the consumers. This will include stables, cows, utensils, milkers, chilling, etc. Given proper control and adequate inspection a great deal can be done to ensure a clean, safe supply.

Water Supplies and Sewerage Systems

The village of Exeter is preparing plans to instal a municipal water supply. A sanitary survey by the Engineering Division showed most of the wells were polluted. The plan recommended is to use deep artesian wells.

Southampton water has shown intermittent contamination for a long time and in spite of warnings from the local health officer and the Department the council refuses to do anything. I would recommend to the Department to enforce the town to install a chlorination plant.

The village of Longford, which is owned and operated by the Standard Chemical Company, was flooded in the spring, the wells, all except three, being under water. Samples taken from these wells showed pollution. A small chlorinating plant was supplied to each house, the school and the chemical plant with instructions to the Superintendent and teacher to see that all drinking water was chlorinated. The company showed the most willing co-operation.

Orangeville and Palmerston have installed a complete system of sewerage with disposal plant. This may stimulate other towns of similar size to do likewise.

Motor Camps and Refreshment Booths

There was an improvement in these as shown by the fact that there were twice as many approved as last year. At the time of inspection there was not one approved motor camp on the Blue Water Highway, an important link between Detroit and the north. Before the season was over two had qualified for approval, Goderich and Wiarton.

While the inspection of refreshment booths remained rigid, eight were approved as compared with two last year.

During the course of inspection of motor camps, the first-aid kits issued by the St. John Ambulance were checked over. Enough use had been made of them to justify the issue, and it is believed they will be used more as their value becomes appreciated. The cases they were used for were mostly cuts, burns and bruises.

The better camps show an increased attendance, due partly to increased motor traffic, partly also to improved conditions. There should be some way of learning when a new camp or booth is opened. We only know by hearsay when a new one opens for business.

Summer Resorts

The question as to whether the water at large summer hotels should be treated or not is becoming more acute each year. This year an emergency call was answered from one of the largest, where samples taken showed the presence of *B. Coli*. A temporary plant was introduced which served the purpose, but risk of these measures failing is very great.

Some criticism was advanced against the disposal of sewage on the boats. This was checked up again this year, and all passenger boats are equipped for treatment with live steam. Whether the privately owned and small freight boats are so equipped or not is doubtful.

Numerous camps for boys and girls were inspected and found satisfactory.

Health Officer

There is one type of service that the public does not use to the extent it might, i.e., intelligently. I mean the Medical Officer of Health. He is ready and eager always to give his support to the welfare of the community. Starting with the child before it is born, he appreciates the value of maternal and prenatal care. Through infancy and childhood he stresses the use of immunization against such diseases as smallpox and diphtheria. If a town wants to put on a campaign for clean milk they should look to the health officer who will give them a lead. He can tell why the family on the tenth has one or more cases of typhoid each year and having located the cause will remove it. There are many ways in which he can serve the community, asking not money, but only the support of the public. Of course there is the occasional one who is the arch humbug of Christendom, but he is rare.

Health Education

Public health efforts have received an impetus by the establishment of additional clinics in the district—chest, venereal and dental. Acknowledgment is made for the assistance given by the Women's Institutes, Victorian Order of Nurses and service clubs. These clinics establish valuable contacts, for example the chest clinic at Wiarton which took in the Indians of the Reserve at Cape Croker. Addresses and weekly articles have reached out farther than before.

DISTRICT No. 3

D. A. McClenahan, D.O.H.

I have the honour to submit the following annual report for the above mentioned district comprising nine counties with a population of 1,200,000.

Child Welfare

An intensive demonstration of child welfare work has been begun under the direction of Dr. J. T. Phair in Port Dover Village and Woodhouse Township, and also in Richmond Hill and Markham Village and Township. This will no doubt be of great educational value to the public and will also furnish the Department with useful information. Quite a number of community nurses are

employed in my district, but these are mostly in cities and towns. The rural sections are still very largely without public health nurses, but a number of them have school nurses, and these are doing satisfactory work with the exception of pre-school and pre-natal work. We thus find that a large part of my area is covered with some form of nursing service, and valuable educational work is being carried on, particularly in the schools.

Communicable Diseases

I have received a list of these diseases in my district furnished through the kindness of Dr. McKay of the Provincial Department.

An analysis of these figures is interesting, regarding the purely preventable diseases, I mean diseases for which we have a known preventative, viz.: diphtheria, scarlet fever, smallpox and typhoid. There were in my district in 1927, 1,824 cases of diphtheria and 162 deaths and in 1928 there were 1,199 cases and 75 deaths. That is to say if the same incidence and mortality rates had obtained in 1928 as in 1927, 87 more children would have died than did actually die from this disease, and there would have been 625 more cases of sickness from diphtheria. This diminution of cases and deaths from diphtheria is due largely, I feel sure, to the campaign carried on for the inoculation of all children with toxoid. Converted into terms of dollars and cents the saving of life alone was worth economically about $750,000, besides the fact that there were 625 fewer cases, and the consequent worry and expense in connection with these would bring the total value of the public health work in connection with this disease in my district due to local Medical Officers of Health and Boards of Health to almost a million dollars. In making this estimate I have followed closely the figures as given by Dr. Dublin of the Metropolitan Life Insurance Company of New York City.

With regard to scarlet fever there were 3,233 cases in 1927 and thirteen deaths and in 1928, 1,683 cases and nine deaths, a saving of four lives and 1,550 cases of the disease. This means also a considerable economic gain.

As to smallpox, there were two deaths in 1928 and none in 1927, but there were 296 fewer cases in 1928 than in 1927.

As to typhoid fever there were in 1927, 121 cases and five deaths and in 1928, 113 cases and twelve deaths. There were eight fewer cases in 1928 but seven more deaths. The cities and large towns are now practically free of typhoid and the disease is becoming more and more a rural disease. Hence, I think it is necessary for us to do more rural public health work. The saving of lives and prevention of sickness should not be contingent upon residence in cities or large towns.

Milk

Only pasteurized milk is exposed for sale in Toronto, Oakville, Aurora, Richmond Hill, Georgetown, Welland and Weston. Most of the towns and villages now have milk by-laws, and more or less efficient supervision of the milk sold. The public is being rapidly educated as to the importance of careful inspection of the sources and handling of the milk supply.

Tourists' Camps

I am satisfied we shall not have satisfactory conditions in all tourists' camps and refreshment booths until the regulations become obligatory and infractions of them be made punishable. Some improvement is noticeable but not so much as we would like to see.

Scope of Public Health Work

We have continued in 1928 the campaign for the prevention of diphtheria by inoculation of children, school and pre-school, with toxoid. We have also attempted to induce municipalities to engage community nurses where possible, either singly or in combination with another municipality. This with supervision of communicable diseases, the attending of meetings of councils and health boards and the education of the public by addresses, moving pictures, etc., have constituted the important part of our work for 1928.

In respectfully submitting this report to the Honourable the Minister of Health, I desire to thank all connected with the Provincial Department of Health, all boards of council, health or education, as well as local Medical Officers of Health, women's institutes and officials of the Department of Agriculture, for uniform kindness and co-operation.

DISTRICT No. 4

N. H. Sutton, D.O.H.

My last year's report ended with a note of hopefulness that the City of Peterborough was in a fair way to adopt a full-time health service and take its proper place in the ranks of progress. A combination of local circumstances have, however, prevented the immediate adoption of this inevitable advance, and Peterborough still lags behind. As the year ends, a brisk epidemic of measles is present in the city. Cases are quarantined when reported, but little or no effort has been made to trace sources or control any but family contacts. When the schools again open and the school medical service is again in action, some improvement in the situation may result.

In Oshawa steady progress continues to be evidenced. There are now five Public Health Nurses on the staff there, and the service of the Health Department is about the best of any city of similar size in the Province; it is a full-time organization in all respects, excepting the M.O.H., who is in receipt of a part-time salary of $500.00. The value of his service to the city is quite ten times that much. The people of Oshawa, under the educational leadership of the Health Department staff, are developing a health consciousness and conscience and co-operating with the Health Department more and more. One way in which this is evidenced is in statistics. More communicable diseases are reported from Oshawa than from any other equal number of people in the district, not because there are more cases but because the people and the physicians have been shown the value of this in tracing down disease, and preventing its spread. Those who are careless or refractory are usually caught by some of the staff and have learned that they might better have reported in the first place.

In Belleville there is a gain in public health thought and action, which at times appears all too slow, but may be the more sure for that, so that a foundation may be consolidated on which to erect more rapidly, the remainder of the necessary structure.

Communicable Diseases

With one exception these have not been specially prevalent. Influenza is the exception, and beginning with early December it has been universally present through the district, reaching its peak between Christmas and New Years.

The disease was mild in character and of three types: respiratory, gastro-intestinal, and nervous (meningeal). The percentage of deaths to cases has been small and most of these due to pneumonic complications in the aged. A much smaller list was due to bronchial or meningeal complications in very young children.

Smallpox was present at the beginning of the year in Haliburton County, but the energetic work of the three really splendid young medical men in that area soon rooted it out. A few cases occurred in the summer in Emily Township, the source being a young man who returned there from lumbering operations near Huntsville, where, he stated, his case had been diagnosed chickenpox. Isolation and vaccination were effectively employed. Two cases occurred separately in Oshawa during the year among the floating population. As the year ends, a few cases are under quarantine in and about Tudor Township, in the Hastings lumbering area. The disease has been in mild form.

Rabies appeared in three places during the year, coming in each case from the direction of Kingston. In March, a dog reached Cobourg from the east and attacked six persons, biting three of them before being shot. The head on examination was found positive for rabies and those exposed were treated successfully. In April, rabies appeared among the dogs in the sourth part of Tyendinaga Township, including the Indian Reserve, and in June in the area about Consecon. All persons bitten or closely exposed were treated and no human cases developed.

Diphtheria has not been specially prevalent, the usual increase among children being again noted after the schools reopened in September. The only place where it has not been successfully handled is Cobourg, where the health officials have not awakened to the necessity of scrapping antedeluvian methods. In six months there have been almost as many cases there, as in the remainder of the district in the entire year. In many places campaigns have been successfully carried on for immunizing the child population by use of toxoid. Many physicians have been successfully urging this among their clientele and the parents in ever-increasing numbers are requesting this protection for their children.

Scarlet fever has not been greatly in evidence and the type has been quite mild—some cases so mild as never to be brought for diagnosis and so not reported, thus adding to the difficulties of control. One fulminant case died in Peterborough a few hours after removal to the Isolation Hospital. This was the child of a milk dealer who, until it came to my notice, was allowed to go on bottling and retailing raw milk from a room in his house to which the remainder of his household had access. Providence was kind, however, and no spread of the disease occurred.

Typhoid fever has occurred all too frequently. In most places the cases were single and the source could not be traced. Three cases arising at a summer resort on Scugog Lake showed evidence pointing to contamination of the milk supply by a carrier, but the carrier has not yet been proved. Late in October a banquet was held in Frankford and two and three weeks later several cases of typhoid and para-typhoid occurred in the area among people whose only exposure in common had been at that banquet. Investigation by myself and again by Dr. A. L. McKay and Mr. Johnston of the Sanitary Engineering Division, of all the evidence, focused the blame on the water used on that occasion. This was from an old well at the banqueting hall which has been allowed to get into some disrepair, and is apparently subject to periodic pollution.

Undulant fever has been diagosed in several places in the district and has caused tedious disability, but no deaths among the cases. I have endeavoured to

spread, as rapidly as possible, among the medical population, the knowledge we have gained of this disease and the facilities which our laboratories have to offer in assistance in diagnosis. Several physicians of ripe experience recall cases which puzzled them much in past years and which they now recognize as having presented symptoms pointing to this disease. It is also plainly seen that we have brought into the open another raw-milk hazard.

Venereal Diseases

It is not more than four years since these really began to be reported and it cannot be contended yet that the cases reported bear anything like a close relation to the number of cases occurring, yet during the year, in Ontario, V.D.G. stood eighth and V.D.S. tenth among the forty-two reportable diseases. When the serious nature of these diseases, and especially the disabling quality of their later effects upon the individual and on the race is considered, and when it is known that the number of cases reported is a small fraction of the cases occurring, the situation revealed is a most disquieting one. It merits the best thought and work of all our health authorities.

Milk Supplies

The year saw the completion of my instructional survey of the retail milk trade in the district. This was done in company with the local officials who were charged with the duty of inspection of these supplies. That it has been effectual is evidenced by the increasing number of municipalities using our laboratory facilities for periodic testing of the local supplies and by the frequency with which I am consulted as to steps to be taken to improve them. I realize, however, that the pressure must be kept up to maintain the rate of improvement. I would say that most places are ready, or nearly ready, to welcome Province-wide pasteurization of retail milk supplies.

Motor Tourist Camps, Etc.

Inspection of motor tourist camps, highway refreshment booths and fresh air camps was made in company with one of our engineers. The fresh air camps are all in pretty fair shape and the managements are most willing to have our aid in making improvements. There has been no increase in the numbers of motor tourist camps, nor much improvement in those operating. Improvement is not likely until they are licensed and must meet the minimum requirements. The same applies to the refreshment booths, some of which should be suppressed.

During the summer I also inspected the summer resort areas throughout the district. With rare exceptions the hotels and boarding houses on the lakes and rivers are fairly well conducted. Groups of cottages are somewhat different and are often too closely built and unwilling to meet the resulting problems in anitation.

I again sampled the waters of the Stoney Lake area and found that the lake water was pure, except in a few localities, as about Government wharves.

I also sampled the water of the Trent Canal system from Peterborough to Trenton, while inspecting the summer colonies along the shores. The pollution of the river by the City of Peterborough is considerable and the tests above the

sewage disposal plant were as bad as below it. It took the twenty miles of slow-flowing river to Rice Lake before the samples showed pure. All Rice Lake samples were pure, but each village upon the river below added some pollution to the water as shown by the tests for varying distances. The pollution from the Town of Campbellford showed for twenty miles below it, in spite of several rapids and falls and over twelve miles of slow water. I was surprised to find that several of the lockmasters' houses erected by the Trent Canal authorities and rented to the lockmasters were not provided with wells and that these employees were expected to drink river water, which tests showed to be impure. This is being taken up with the Superintendent.

Public Health Nurses

Miss Shantz, the nurse last year appointed to start this service in Lindsay, did a remarkably fine work and quickly established it as indispensable there. Unfortunately her fine spirit and devotion to duty drove her to work beyond the limit of human endurance and she broke down under the strain. The local authorities waited for months before accepting her resignation in the hope that she would so recover as to be able to come back to them. They had at last to regretfully accept her resignation and are at the end of the year looking for her successor and there is none at the time available.

During the autumn a demonstration of the nursing service has been made in Picton, Bloomfield and Wellington, with such general approval that the authorities in those municipalities have all expressed themselves in favour of securing a nurse for the three. Action was deferred to the councils incoming with the New Year.

In other municipalities where nursing services are established, increasing popularity and usefulness has been the rule.

Public Health Education

This work is being done to an encouraging degree by several M.O.H.'s within the District—as many rural as urban, but in most places this work is not done by these part-time officers. They maintain that they have not time for it, do not know just how to go about it and are not paid enough, nor would be paid enough to allow them to do it. Almost 90 per cent. of them would welcome a full-time service for counties or areas which would relieve them of duties which they know are impossible to properly discharge under the part-time system.

The authoritative articles appearing in the press and addresses over radio are having a cumulative effect upon the public, and in some respects I am forced to believe that they are readier for advance than the general medical profession are ready to lead.

During the year I have addressed several groups of people: Service clubs, Women's Institutes, Municipal Councils, Boards of Education, Boy Scouts, Junior Farmers and Junior Institutes. The Women's Institutes especially are an effective organization and I hope to have a wider touch with them in the coming year. Their efforts to get things done are usually very direct and to the point. I have found a sort of round-table conference at these meetings is much the most effective feature of them.

DISTRICT No. 5

PAUL J. MOLONEY, D.O.H.

Owing to amendments to The Health Act in 1927, District No. 5 now consists of the counties of Dundas, Stormont and Glengarry, Leeds and Grenville, Frontenac, Lennox and Addington, Lanark, Renfrew, Carleton, Prescott and Russell, and the cities of Ottawa and Kingston, the total acreage being 5,570,763 and the population approximately 500,000.

The central office, which for many years has been located in the city of Ottawa, continues to be utilized as a source of information and a public health centre to an increasing extent each year through personal interviews by letter and telephone. The latter means of communication is particularly noticeable by its increase, scarcely a day passing without many long distance calls from health officers, Boards of Health, municipal councils, and others connected with public health matters. Written communications now received by letter exceed 3,000 annually.

All the public institutions, thirty-four in number, have been inspected regarding their sanitary condition and reports sent to the Provincial Department of Health, and, where indicated, to the governing bodies. A request for the elimination of unsanitary conditions or for the installing of needed improvements has generally been promptly met by those in charge of the management. Request for the investigation of special conditions existing in different localities in the district have been promptly responded to when at all possible, and, if justified, vigorous action has been taken in regard to the sanitary conditions.

I desire to record the hearty co-operation and valuable assistance received from the various divisions under the control of the Provincial Department of Health and also from the Inspectors of the Ontario Department of Labour, the Provincial Public Health Nurses, the Mothers' Allowance Board and Inspectors, the Federal Veterinary-General's Department, and the Canadian Tuberculosis Association.

Besides the reports which cover the work each month which are sent to the Department, special reports dealing with and giving information in detail concerning important conditions which have arisen have been sent to the Department during the year.

COMMUNICABLE DISEASES

Except for a rather severe outbreak of smallpox in the beginning of the year there were no very serious epidemics of communicable disease.

SMALLPOX

This disease was very prevalent during the closing months of 1927. In January and February of 1928 it continued in certain sections during January and part of February. Cornwall Town and suburbs gave the most difficulty. Extensive campaigns for vaccination were undertaken and free clinics for this purpose established. In Cornwall they reverted to the old system of establishing an Isolation Hospital with very good results.

Chickenpox

Chickenpox was prevalent in and around Ottawa during the spring, and owing to the severity of many of the cases I was frequently called upon to make a diagnosis between it and smallpox. While this disease was well under control by midsummer the occasional case cropped up here and there during the balance of the year.

Typhoid Fever

This disease has been pretty well eliminated in this end of the Province in recent years owing to sanitary precautions. However, during the year we had more cases than usual. Besides the sporadic cases a severe outbreak occurred in a road gang on the Pembroke-Ottawa Highway, due to a contaminated water supply that the men were using for drinking purposes. Seven cases occurred in the road gang and three deaths. A new source of water supply and the innoculation of all the workmen seemed to control this outbreak. A noteworthy feature was that with one exception the disease did not appear among the foreigners who constituted over 75 per cent. of the workmen. It is possible that they were immune owing to their habitual use of contaminated water supplies. As this outbreak was only one of many which has occurred in recent years in the road construction gangs, I have asked the Department to promulgate regulations regarding the water supply in those cases, and making it compulsory on the contractor to supply drinking water from approved sources only.

At Iroquois there was a small epidemic apparently due to the practise of the summer residents at Iroquois Point of throwing their garbage and other wastes into the St. Lawrence, a short distance above the town's water intake pipe.

In Rockland we had the usual recurrent cases whenever the chlorination plant went out of order. In the latter town, in the fall of the year, they installed a new chlorination machine.

Tourist Resorts, Wayside Inns, Etc.

This end of the Province is bountifully supplied with localities suitable for tourist resorts and campers. The Thousand Islands and the other resorts in that river, together with its shore line, afforded location for the greatest number. The Rideau Lakes have always been very popular owing to the purity of their waters, the charming scenery and excellent fishing. As many as 500 summer homes are located on one of these lakes alone. The county of Frontenac has over 400 charted lakes. Other favourite resorts in this locality are Christie, Otty and Sharbot Lakes. The Ottawa River is not used to the same extent as a tourist resort as some of the other waters, although on its upper reaches it is becoming more popular every year.

On the highways, as in the other parts of the Province, wayside inns and restaurants have been established in great numbers. In connection with these the regulations drafted by the Department, which entitle those that came up to a certain standard to display a banner or placard reciting that they were approved by the Department, has had a very good effect. More than twice as many, especially restaurants, qualified for this approval than in the previous year.

Before the season opened all health officers were advised by this office as to their duty with regard to inspecting the tourist resorts, summer camps, wayside inns and so forth, and that a check-up on their work would be done by

Departmental officials later on in the season. This had a very good effect, and when I made my usual summer inspections I found considerable improvement over former years in sanitary surroundings.

In this work I received valuable assistance from Mr. Burn, sanitary engineer of Dr. Berry's staff, and Mr. Smith of the Sanitary Inspector's staff.

Under this heading I would like to refer to the excellent summer camps conducted by the Y.M.C.A. at Shirley Bay and Golden Lake. Also the Ottawa Boys' Camp at Mink Lake, the boys' camp at Christie Lake, and a very select camp for girls at Camp Oconto.

Chest Clinics

During the year a series of excellent chest clinics was conducted in different centres by Dr. Brink and his assistants. These clinics were well patronized—as a rule many more presenting themselves for examination than could be examined during the days allotted to the particular locality.

Public meetings were frequently held where the subject of the prevention and cure of tuberculosis was ably discussed by Dr. Brink and others. The practise of giving yearly clinics in certain localities has been established. Clinics were held at Arnprior, Renfrew, Pembroke, Kemptville, Prescott, Winchester, Chesterville, Alexandria, Brockville, Cornwall, Napanee and Carleton Place.

It was found as a result of the clinics that a sanatorium in Eastern Ontario was urgently needed. This matter was taken up by the Canadian Tuberculosis Association and a campaign was inaugurated for the establishment of such an institution in a central locality which would serve the needs of the six eastern counties and the separated towns of Brockville, Smith's Falls, Gananoque and Prescott. In the scheme it was provided that a committee representing the six counties and the separated towns would have the control of the institution. The cost of the building and its equipment was expected to be materially aided by a government grant. This movement received the active co-operation of the Department and addresses were given to the various county councils in its support. Dr. Bell, Deputy Minister, among other officers of the Department, gave his assistance. All the counties and separated towns, with one exception, have expressed their concurrence in the scheme. It is hoped that the one remaining county will fall in line at the next meeting. It is planned to have an up-to-date institution both as to buildings and equipment; that it be placed in such a locality as would make it convenient of access to all patients in the district. No public health movement so badly needed or gives such promise of usefulness has been before inaugurated in the district.

Public Health Nurses

During the year the Division of Child Hygiene gave several demonstrations of public health nursing. Demonstrations were, as usual in this district, welcomed by the people generally and received their enthusiastic support. The employment of a permanent Public Health Nurse following the demonstrations, however, was unsatisfactory. The only additional Public Health Nurse engaged during the year was at Cornwall. Arnprior and Prescott have the matter under consideration with fair prospects of a nurse of their own being employed.

Misses Campbell, Squires, Mickleborough and Lunn were in charge at different centres.

A very successful demonstration was given at Arnprior with Miss Squires in charge. Local organizations took charge of a movement for supplying a milk ration in the schools daily for under-weight children, and as the movement is still under way it is likely to become a permanent feature.

A very successful Child Health Clinic was given by Drs. Phair and Kiteley, which was followed later by many physical corr ctions.

During the demonstration the Public Health Nurse rendered valuable aid in abating a wide-spread outbreak of diphtheria by her active co-operation with the local health authorities.

Both Braeside, which was included in the demonstration, and Arnprior, through their Boards of Health, were unanimous in favour of the employment of a permanent Public Health Nurse.

Miss Mickleborough rendered very valuable assistance in putting energy and system into the work of the local health authorities in supressing the small-pox outbreaks which occurred in the beginning of the year, especially in Cornwall.

In Prescott and the township of Edwardsburg, and in Perth with the township of Drummond, demonstrations are in progress under Misses Lunn and Squires.

Other notable public health events connected with the district were:

Filtration of the Ottawa Water Supply

For many years the Department through this office has been pressing the city of Ottawa to take steps to improve their water supply. Many years ago the source of the city's water supply was a matter of serious contention among the citizens. Large sums of money were spent in exploring the feasibility of a supply from different locations in the Gatineau region. The question became involved in local politics and the ratepayers seemed hopelessly divided as to which of the different schemes should be adopted. Eventually an overland pipe was constructed from the waterworks intake at Lemieux Island to the city mains. Chlorination was the only further precaution depended upon to protect the water supply. The water supplied the citizens is markedly brownish in colour and the dosage of chlorine very high. Contaminating material, of course, has not been removed and is much in evidence at certain seasons of the year, and during stormy weather when the waters of Lake Deschenes are stirred up.

Of late years, owing to the industrialization of the Gatineau River and the lakes in connection with it, this source of supply has been eliminated.

After considerable negotiation all former factions, including the local press, tactily agreed to support a filtration plant in connection with the Ottawa River supply.

The Deputy Minister, Dr. Bell, and Dr. Berry, chief sanitary engineer, were very important factors in bringing about this unanimity of action.

A vote of the ratepayers was taken at the municipal elections in the fall and the project was endorsed by a very large majority.

Sometime will elapse before Ottawa will enjoy the benefits of the improved water supply as certain experiments have to be carried on to determine the proper method of treating the water to get the best results. This will involve considerable delay. Much of this delay might have been prevented had the city authorities been willing to accept the offer of the Department to carry on these experiments practically free of charge, as far as staff was concerned, during the summer months.

Sewage and Water Supply for Ottawa Suburban Areas

West of Ottawa City and stretching along the Ottawa River is a suburban area which in the summertime has from twelve to fifteen thousand inhabitants, with probably seven thousand of them resident during the whole year. No part of this district is supplied by municipal waterworks or sewers. A great number of individual plants have been constructed and after being used for several years the wells became contaminated. On an intensive survey it was found that 50 per cent. of the wells were grossly contaminated and only a small proportion of the rest were fully acceptable.

This district was anxious for annexation to the City of Ottawa but the city refused, not caring to burden themselves with the expense liable to be involved.

A very active committee of the suburban residents had the sanitary problem under consideration for many years but were unable to arrive at a solution which would be acceptable. The chief obstacle was the expense involved in any proposed water and sewer system. The committee asked for the good offices of the Department in helping them to solve their difficulties. Dr. Berry and the Deputy Minister, after careful gathering of the facts connected with the situation, met the committee in the fall of the present year and advised that legislation be sought by the Township of Nepean authorizing the Township Council to set apart a certain district as a waterworks and sewer area. This advice was accepted unanimously by the committee and was later endorsed at public meetings held in the police villages and other sections of the area involved.

Acting on the petitions presented, the Township Council have applied to their solicitor for legislation enabling them to set this area apart for the purpose above mentioned.

Rabies

Rabies has been very prevalent in the district during the year and a great number of people have been bitten by rabid animals. These have all been treated with the Pasteur serum supplied free by the Department. The control of this disease in the District is, in my opinion, far from satisfactory, and I respectfully submit that a more definite understanding as to their respective obligations and duties should be arrived at between the Dominion and Provincial authorities.

DISTRICT No. 6

W. Egerton George, D.O.H.

I have the honour to submit my Sixteenth Annual Report for the area comprising the Districts of Cochrane, Temiskaming, Nipissing, Parry Sound, and part of Sudbury.

Personnel

Public health efforts of Health District No. 6 are directed by the following staff:

I. District Officer	W. Egerton George, M.B., D.P.H.
II. Public Health Nurses . .	Miss Rose Hally
	Miss H. E. Smith
	Miss M. H. Lunn
	Miss Margaret Nealon
	Miss Bertha E. Johnson
III. Sanitary Inspectors . . .	John Richardson
	David McKee
	Hugh McIntyre
	A. Smith
IV. Laboratory:	
Director	W. R. Michell, M.B., D.P.H.
Assistant	John Lawson
Stenographer . . .	Miss Roma Langlois

Miss Rose Hally confined her attention to general public health nursing demonstrations in the organized Townships of Tisdale and Whitney, as well as along the T. & N.O. line from Porquois Junction to Timmins including the unorganized area about the latter town.

Miss H. E. Smith served in the area from New Liskeard to Kirkland Lake, including the Elk Lake Branch and fifteen organized and unorganized townships in the vicinity.

Miss M. H. Lunn came to Parry Sound about the middle of the year and served in the town and surrounding country as far east as the Townships of Hagerman, McKellar, Christie and Humphrey.

Miss Margaret Nealon began to work last September in the area from New Liskeard south, including Townships of Buck, Coleman, South Lorraine, and Gillies Limit, and continued until the end of the year.

Miss Bertha E. Johnson lives at Sudbury and serves on the border between between Health Districts No. 6 and No. 8, including eight townships in District No. 6.

Sanitary Inspectors John Richardson and Hugh McIntyre give their whole attention to Health District No. 6. David McKee is stationed at Sudbury and divides his time between District No. 6 and District No. 8. A. Smith gives but a small part of his time to that section along the C.N.R. line from Scotia Junction to Ottawa in this district. The most of his time is given to District No. 5, but both District No. 4 and District No. 3 receive a share of his attention.

Laboratory

Our laboratory, which had been closed in November, 1927, because of the resignation of the Director, Dr. John S. Douglas, was opened early in the year (January 20th) under the able direction of W. R. Michell, M.B., D.P.H. Since that time the laboratory has slowly increased its usefulness as indicated by the steadily increasing number of specimens. Miss Roma Langlois took charge of the office about the middle of January.

COMMUNICABLE DISEASES

	1928	1927	1926
Anthrax	0	1	0
Cerebro spinal meningitis	5–4	2–2	1–1
Chancroid	1	0	0
Chickenpox	125	83	96
Conjunctivitis, acute infectious	3	0	1
Diphtheria	53–2	50–3	40–2
Encephalitis lethargica	1–1	0	0
Gonorrhoea	127	60	17
Influenza epidemic	119–1	37–1	10
German measles	1	25	4
Measles	155–1	547	387
Mumps	258	131	47
Paratyphoid fever	9	0	0
Pneumonia:			
(*a*) Acute lobar	26–6	26–8	11–2
(*b*) Bronchial	11–7	13–8	12–5
Poliomyelitis, acute anterior	4–3	0	0
Puerperal septicaemia	0	2–2	0
Scarlet fever	90–2	89–1	137–1
Septic sore throat	62	9	4
Smallpox	43	42	83
Syphilis	56	21	9
Tuberculosis	12–4	38–1	7
Typhoid fever	23–2	32–1	14
Whooping cough	66–1	41	89–1
Goitre	1	0	0

Deaths reported from all other causes, 356.

Returns

It was thought that it might be interesting to check the weekly reports of certain communicable diseases against laboratory reports for the same diseases.

Diphtheria

The weekly reports gave only fifty-three cases and two deaths while laboratory returns for the same year gave positive swabs from 106 different patients.

Tuberculosis

The weekly reports gave a total of twelve cases and four deaths while the laboratory returns show positive sputums from fifty-nine different individuals.

Typhoid

The weekly reports indicated twenty-three cases of typhoid and two deaths while laboratory returns show ninety-two positive Widals.

There may have been some positive diphtheria swabs obtained from carriers; or positive tubeculosis sputums from patients reported in the previous year; or positive Widals from carriers, but I am sure the discrepancy between weekly reports and laboratory returns cannot be reasonably explained in this manner. Indeed, if the laboratory returns for diphtheria, tuberculosis and typhoid are any criterion of the correctness of weekly returns as a whole, it would appear that they are of restricted value. However, it is well known to this office that the weekly returns are very complete from a good number of local Boards of Health and it is quite safe to use the statistics of such.

Diphtheria

The returns for this disease compare favourably with previous years. Parry Sound reported sixteen cases which was the largest number reported from any municipality, yet there was nothing simulating an epidemic. The highest number reported in any one month was three and this number was reported in both August and October.

A small outbreak occurred in South River in September and October. The patients were extremely ill, so that it was quite impossible to mistake the diagnosis. The prompt administration of large doses of antitoxin, followed by active immunization of a large number of children who were exposed, prevented the mortality which threatened.

Typhoid

Timmins reported twenty-six cases of typhoid throughout the year, the most of which occurred in two small outbreaks. The first was in April and May and the last in September and October. In the April outbreak a carrier was found in one of the dairies, but in that of September the milk supply seemed to be free from suspicion. Every case was carefully investigated, especially in regard to water supplies, milk supplies, inside toilets or outside privies, previous cases in the families and sources of butter and cheese. Although each case was carefully examined by both the district officers and the Director of Sanitary Engineers, it seemed impossible to place the responsibility on a single source, and your officials were forced to fall back on that "easy escape," flies and carriers. In spite of the continued good bacteriological reports obtained on this water, the district officer feels that a very careful examination of the water supply by our Engineering Division must be undertaken in order to place the water beyond suspicion. The chlorine empties into the pump well opposite the mouth of the water inlet from the river. Three pump intakes are located in each side of the inlet (six pumps). Possibly the operation of more pumps on one side than on the other would result in inadequate mixing of the chlorine in the water. Sampling of water by taking eight ounces once a week for laboratory examination may easily miss possible pollution for many months; particularly is this the case when the sample is taken at approximately the same hour of the day, a few minutes before shipping time when conditions in the pump house are approximately the same.

In the month of October an outbreak of typhoid began in a restricted area of Sturgeon Falls which finally totalled twelve cases. The fact that the outbreak was not general throughout the town gave the health officer information that it was unlikely that the water supply was at fault. Careful investigation made him suspect a certain small dairy where the man's wife had been sick for two or three weeks in the spring or early summer. A Widal test from this woman gave a positive reaction. The dairy was closed pending examination of bowel and bladder discharges. As the people decided to close their dairy, only one urine and faecal examination was made and this proved negative.

Mumps

In January an epidemic of mumps began along the Canadian National Railroad in the District of Parry Sound between Powassan and Scotia Junction.

The centre of the epidemic seemed to be at Burks Falls. Only a small proportion of the total number of cases were reported. The disease was of exceptionally mild type; consequently, exceptionally few of the complications that make mumps a dreaded disease were in evidence.

Tuberculosis

Out of a total of fifty-nine persons who showed positive sputums in this health district, nineteen were reported from Sudbury. This is one-third of the total and was more than twice as many as that reported from any other town in the district. It was thought that the large foreign (Finnish particularly) population was the most important cause of the high incidence of tuberculosis. An examination of the laboratory returns of positive sputums indicates that while this is an important contributing cause, the municipality, entirely without these, is credited with an excessive amount of tuberculosis.

Measles

An extensive epidemic of measles broke out at Kirkland Lake in October and continued through November and first half of December. There was only one fatal case in the Township of Teck. The epidemic extended to the neighbouring unorganized townships along the Nipissing Central Railway as far east as Larder Lake. Only a small proportion of the total number of cases was reported.

Influenza

In December influenza became epidemic over most of Northern Ontario. Cobalt was the first place to be seriously affected in this district about December 1st. Schools were closed when six teachers were compelled to take to bed and 250 to 300 children were absent. By Christmas, Sudbury, New Liskeard and Kirkland Lake had in the neighbourhood of one-third absent from the schools. Cobalt by this time was over the worst. North Bay, Parry Sound, Haileybury, Cochrane and Timmins were not so seriously affected, as only about 15 per cent. were absent from school at one time. Altogether the epidemic of flu became characterized by a spotty nature in so far as the disease became very prevalent in certain sections, less prevalent in others, while some places seemed to be missed entirely. This characteristic was noted throughout Ontario. Many of the municipalities kept their schools closed for a few extra days, so that instead of opening on January 3rd they opened on the 7th. Reports from this district in the week following the 7th of January indicated that the epidemic had spent itself before the end of the year, and school attendance was back to normal. Extremely few fatal cases were reported; in fact, I have the history of only one and that in a man seventy-five years of age. The increased severity which was noted in many places in southern Ontario toward the termination of the epidemic was not seen here. Indeed, the outbreak was very mild although it followed the distinctive explosive nature noted in 1918 and 1919.

Immunization

Vaccination for Smallpox

In North Bay the medical officer carried on a campaign for vaccination in the schools with the result that between 600 and 700 school children were vaccinated.

In Sturgeon Falls between three and four hundred were vaccinated. This work has been carried on for many years with the result that Sturgeon Falls has a school population immune to smallpox. Although the disease has become prevalent in the neighbouring townships many times during the past four years and particularly during 1928, yet the town has remained free.

In April there were a number of cases of smallpox in South River which promptly came under control as soon as the children were vaccinated. The medical officer, Dr. Dawson, carried on a house to house vaccination of both adults and children.

Diphtheria

In Englehart, Charlton and Earlton all school children were actively immunized to diphtheria by the toxoid method approved by the Department.

In Sudbury no school campaign was carried on for the administration of toxoid, but physicians in their private practice recommended it to their families with the result that a large number of children were immunized against diphtheria.

In the Township of Tisdale the children in the primary grades were given toxoid at South Porcupine and Dome.

Public Health Nursing

Under personnel it was shown that five Departmental Public Health Nurses operated in District No. 6 during a large part of the year 1928. The problems of transportation in winter has decided the Department to centre the activities of the nurses to urban centres during the cold weather and to give rural areas more concentrated attention during summer months. To this number must be added the splendid body of nurses in the public health field and maintained by the Red Cross. These are located at North Bay, Bonfield, Whitney, Loring, Haileybury, New Liskeard, Kirkland Lake, Englehart. Outpost hospitals are maintained at all these places with the exception of North Bay.

A careful survey was made in forty townships by the Provincial Nurses. This included physical examination of all school children and the visitation of all homes. The examination of the children in the homes was included in these visits. The opportunity in the home was taken advantage of to spread information on public health, particularly with regard to personal hygiene and sanitation.

Regarding oral hygiene, Schumacher deserves a prize in this area for providing the largest percentage of children who are using a tooth brush. Two hundred and sixty-four out of 347 were using a tooth brush daily, that is 76 per cent. It is to be regretted that the same municipality which has done itself so much honour in oral hygiene should also achieve the unsavory distinction of having an infant mortality rate, 310 per 1,000 live births. With such distressing conditions it is hard to understand why Schumacher should voice the chief opposition of the Township of Tisdale to the appointment of a Public Health Nurse, since such an appointment would undoubtedly have meant to them a great saving of life.

An outstanding success in this district by our Public Health Nurses has been the rediscovery of the fact that an unusually high percentage of eye defects are corrected after the holding of eye clinics by a competent specialist. No better illustration could be given than the success of Dr. Hill's school clinic at South Porcupine when out of thirty-eight attending the clinic thirty-four required glasses. The others required operation or hospital treatment. Practically 100 per cent. followed Dr. Hill's advice.

The educational value of the public health work was never so pronounced as during the past year. The opposition to the Public Health Nurse which resulted in certain places in open obstruction has been followed this year in Parry Sound and Cochrane by progressive and increasing co-operation.

The remedial work which has been carried on by Miss Roper, Red Cross Public Health Nurse in this area, among indigent children is deserving of special mention. Five dental clinics were held with a total of eighty-seven fillings, 561 extractions and 256 children in attendance. Five tonsil clinics were held at which tonsils were removed from eighty-eight children. The efforts put forward by parents in rural areas to get their children to the tonsil clinics, often requiring driving or walking many miles, indicate that an important obstacle to the correction of this defect is finance; while the large attendance of children at the dental clinics at Feronia, Bonfield, Rutherglen, Callander and Chiswick indicates that the distance as well as finance is an important obstacle to the correction of dental defects.

Unorganized Areas

The problem of communicable disease control in unorganized territory continues to demand a larger proportion of time than can well be spared by this office. The difficulty is aggravated by the absence of local medical officers to whom reports can be made, and by the absence of municipal clerks whose duty it is to forward the reported cases to the Department. The mildness of most communicable diseases is the most important reason why they are not reported. In fact, great care is taken in order to prevent knowledge of new cases becoming known until the patient has recovered from the symptoms. In other words, the patient is secluded until clinical recovery. After this time smallpox and scarlet fever are particularly dangerous to others, and as the patient then mixes with the public, the disease spreads rapidly. When schools become invaded, reports are soon sent to the district officer when it is frequently necessary for him to travel hundreds of miles by train and then drive many more in order to discover, placard and quarantine all cases or immunize contacts. It is most imperative that the improved basis of co-operation between the Provincial Sanitary Inspectors and district officers be extended by amendment to the Health Act or to the regulations so as the Sanitary Inspectors may be used to put up or remove placards in territory without municipal organization. Although it is necessary to register deaths before a body is buried, yet these registrars for unorganized areas have no legal responsibility or forms by which these returns may reach the district officers. They could be of great assistance to him and would help frequently to direct his attention to more serious matters.

At the last session of the Legislature the long looked for medical relief of indigent settlers and others in unorganized townships was placed in the hands of the Northern Ontario Relief Commission under the able Chairmanship of W. H. Alderson, together with many other duties including relief of other kinds. The consistent co-operation which has been extended by this Commission to this office has alleviated one of the difficult problems with which I have had to deal. If one could be excused for offering a little constructive criticism, it would be that the Commission is completely dependent on the personnel of other departments or on private individuals for its sources of information. Undoubtedly, large numbers of poor settlers are suffering and deserving of relief, but nothing is heard of them because Public Health Nurses or other Government

officials have not visited the area. There is no doubt, however, that a great step forward has been made, and that the responsible authorities are able and efficient. Suggestions are not required from this office, but the pointing out of such obvious weaknesses will support their call for legislation to support their hands.

Milk Supplies

Following the programme set out last year, it was decided to confine my attention to the dairies at two or three points. The places selected were North Bay, Sturgeon Falls, Cochrane and Parry Sound. However, it was found necessary to drop Parry Sound as I was spending too much time with dairies.

The North Bay Council put through a by-law compelling all milk to be pasteurized. This was not such a difficult piece of legislation as is usual because of the fact that the industry itself had gradually increased the quantity of milk pasteurized until somewhere in the neighbourhood of 70 to 80 per cent. was being treated. The medical officer and local Board of Health decided to ask the council for a by-law compelling the balance to provide similar treatment. The city fathers deserve the commendation of this office for the thoroughness and dispatch with which the matter of milk by-law was investigated and carried. While North Bay is second to Sudbury in demanding this requirement, yet North Bay had no such propelling force demanding solution of a difficult problem by this method. It is from a public health viewpoint an outstanding by-law; and its influence, combined with the influence of the Sudbury by-law, will assist many local Boards of Health in the district in securing similar protection for the citizens of their respective municipalities.

Sturgeon Falls

An inspection was made of all their milk producers by this office, and two were found in such unsanitary condition that recommendation was made to the local Board of Health that they be closed. This suggestion was accepted, but the recommended improvements in the next grade were not so carefully enforced. When, however (later in the year), suspicion fell on one of the dairies as the source of several cases of typhoid as described above, the Council gave the medical officer the necessary authority to take what action was necessary to protect the citizens against careless producers.

Cochrane

A similar inspection of all dairy barns and equipment was made for Cochrane's milk supply. Two were found unfit for the production of milk and were accordingly brought to the attention of the local Board of Health. Two others were in such poor condition that recommendations were sent in, giving three months to correct the major unsanitary conditions. One of these has since been closed. The closing of the dirty producer has given encouragement to the clean dairymen who are trying to give service, while it has made it plain that the town will not permit its milk supply to be exposed to any hazard from carelessness or lack of essential equipment.

Timmins

It is a matter of regret that Eplett milk, which is pasteurized and imported from New Liskeard, was allowed to become so high in bacterial count, mostly from careless supervision of producers, that the local Board of Health had to withdraw their support to this product. Apparently the public support also disappeared as the company discontinued sale.

Summer Tourist Camps

During the past year summer tourist camps increased rapidly in numbers in District No. 6. In fact it was quite impossible to keep an accurate list. Previous to last year, with the exception of the camps along the Ferguson Highway, there were not more than ten. There were, however, some twenty-seven camps along the highway between Cobalt and North Bay. Of these two received the certificate of approval of the Provincial Department of Health. Two others only received this distinction. They were located at Sudbury and North Bay.

Many municipal camps opened up at Cobalt, Haileybury and New Liskeard and other towns farther north, while a number of private camps offered accommodation along the highway.

Other private camps were opened along the Toronto Highway between Parry Sound and Rosseau.

Repeated sampling of wells and water supplies at all camps opened by the Forestry Branch on the Ferguson Highway were made. About ten are supplied with wells and pumps. Of those, any that gave unsatisfactory samples were chlorinated and pumped out. If grade A samples were not obtained, the pump was taken out and a sign placed on the well. I am glad to say that this was necessary in only one case.

The large camp at Tilden Lake was given a safe well supply by drilling into the rock, while at Martin River and Wilson Lake electric light plants were installed.

Garbage tins with tight tops and incinerators were supplied at the larger camps. Privies of the fly-tight pit type were provided. Pavilions, kitchens, bath houses and tent stands are part of the standard equipment in these camps. Caretakers were in charge at Tilden Lake, Martin River, Wilson Lake and Duncan Lake; with the result that splendid records were kept. The site was kept clean, wood was provided, garbage removed daily and privies were kept clean.

Water Supplies

With the exception of Englehart, New Liskeard, Verner and Burks Falls, all municipal water supplies in this district are chlorinated to meet the requirements of an inspector from the Sanitary Engineering Division.

Englehart and New Liskeard have protected ground water supplies and therefore do not require chlorine.

Verner has a filtration plant, but the municipal authorities should have impressed upon them the increased protection which chlorination would provide.

Burks Falls own the lake and watershed from which their supply is obtained by gravity. The water is free from pollution of dangerous bacteria, but it has a high colour, an objectionable odour and bad taste. The difficulties mentioned have prevented its general use. The present system was installed with the approval of the late Provincial Board of Health and for that reason considerable assistance was offered and given toward the removal of their objections. Our Engineering Division is of the opinion that the difficulties could be removed, but the corporation is apparently opposed to spending any more of their own money.

A new municipal water supply was approved and installed at Swastika in the Township of Teck. As the water is filtered and chlorinated, Swastika now has a safe drinking water supply to take the place of that from a comparatively small

number of wells, some of which were dangerously polluted. The water is taken from Amikougami River. The river, although not very large, is not exposed to any great pollution since there are few living along its banks.

Sewers and Sewage

Timmins

The activated sludge treatment plant owned by the Town of Timmins has become inefficient because the growth of the town has overtaxed its capacity. The plant has also been embarrassed because of faulty construction in the sedimentation tank into which the sewage enters after aeration. The hopper bottom was not sufficiently steep to allow the sludge to slip down where it could be pumped out. The sludge having become lodged on the hopper bottom, the contents of the tank rapidly became septic. As a result the usual nuisance of the sludge beds have been greatly augmented, while the effluent has not that clarity for which the system is famous.

Kirkland Lake

A problem of sewage disposal has been rapidly forcing itself on the town as the town disposes of the sewage by septic tank treatment, then empties its outfall into Kirkland Lake. This lake receives tailings from the mills of the Wright Hargreaves, Lake Shore and Teck Hughes Mines. The outfall sewer enters the lake in a bay which is in danger of becoming cut off by the tailings of the Wright Hargreaves Mine. The method of solution was not definitely decided upon when the year closed.

Parry Sound

The installation of a sewerage system in Parry Sound has always presented serious difficulties, and since it was built up in sections it really became, because of the topography, a collection of systems of more or less dimensions. Many of these systems have a separate outlet. The problem is further involved because the town occupies both banks of the mouth of the Seguin River. Most of the sewer outlets empty into the Seguin between the power dam and the mouth of the river. This arrangement, although not satisfactory, was free from nuisance because of the enormous dilution. However, a small dam at the mouth of the river was built and owned by the Conger Lumber Company. This dam raised the water as far up stream as the power dam to a depth of four feet and provided the reservoir for the dilution of the sewage. The outfall sewers from these various small systems mentioned above were placed in the river under these conditions. Two or three years ago the Conger dam burned out during dry weather with the result that the bed of the river dwindled to a small stream, leaving the several sewers exposed on dry ground. The nuisance, which resulted during the heat of the summer in 1926 and 1927, gained some unpleasant notoriety for the town. The solution was the more perplexing since the municipality did not own the site of this small dam and the original owners refused to part with it to the corporation. However, it was sold to a second party who after a year or two sold the site to the town at a favourable price. The municipality immediately built the dam and prevented the recurrence of the nuisance during the past summer.

The steady improvement in the administration, especially that characterized by the co-operation of the personnel, is a matter that has been noted by all Divisions of the Department. This office wishes to express to the Minister and Deputy Minister its appreciation of the order which has already been brought

to a rather heterogeneous Department, and to express the hope that still other successes in this direction will crown your future efforts. During the year it was recommended to the Department that the camp regulations be altered so that the responsibility for the sanitation of camps would be placed upon the Inspectors of the Department. At the present time the contracting physician is responsible for camp sanitation. If he is efficient in these duties, he is in danger of being reprimanded by the company officials. In other words, his duty and his personal interests are in opposition to each other. As a consequence the unsanitary conditions requiring correction are now largely left to the Departmental officials, while the contracting physician continues to collect fees for a service which he is unable to perform.

DISTRICT No. 7

G. L. Sparks, D.O.H.

The following report for 1928 covers the period from January 1st to September 25th and is written from memory, as I am at present on leave of absence and unable to refer to the office correspondence containing the detailed record of the work carried on during the above period.

Communicable Diseases

There were no serious outbreaks of communicable disease. One case of smallpox occurred during the winter at Dinorwic, in territory without municipal organization, in the District of Kenora. The patient and contacts were quarantined and vaccination and other preventive measures instituted in the community. Fortunately there were no secondary cases.

During the summer an employee on a passenger steamboat docking at Fort William developed typhoid fever. An investigation of the circumstances was followed by an inspection of the water supply system on the boat, and by the systematic taking of blood specimens for Widal from the members of the kitchen and dining-room staff. Reports of the positive and doubtful Widals were telegraphed to the Department by whom the necessary final action was taken; and no further outbreak of typhoid fever was reported on this boat.

In two or three instances it became necessary to make arrangements for the removal to sanatoria of indigent tuberculosis patients resident in territory without municipal organization.

In the late summer a visit was made to Ignace at the request of the local M.O.H. to see a case of suspected infantile paralysis. The patient died before I arrived in the municipality, so there was nothing to do but advise the local M.O.H. to take the measures required under the regulations.

No visits were made into territory without municipal organization in connection with scarlet fever or diphtheria.

Motor Tourist Camps and Refreshment Booths

During July and August I accompanied Mr. C. P. Robins (from the Sanitary Engineering Division) on the annual summer inspections of motor tourist camps and refreshment booths in the district. Motor tourist camps were inspected at

Nipigon, Port Arthur, Fort William and vicinity and at Fort Frances. Refreshment booths were visited along the main roads radiating from Fort William and Port Arthur and along the main road from Fort Frances to Rainy River. No certificates of approval were issued either to motor tourist camps or to refreshment booths. Considerable improvement was noted in the motor tourist camp at Chippewa Park (adjoining Fort William) and at the Port Arthur (Current River) camp.

Survey Fort William and Port Arthur Milk Supplies

The milk pasteurization plants in Fort William, Port Arthur and Kenora were inspected during July and August by Mr. C. P. Robins (from the Sanitary Engineering Division). I accompanied Mr. Robins on as many of the inspections as time would permit. The efficiency of operation at each plant was checked as closely as possible and temperature readings of the raw milk were taken as the producers' shipments were received at the plants. Visits were made to as many producers' farms as possible, and at the conclusion of the survey we met the local Boards of Health at separate meetings. I endeavoured to point out the vital importance of a clean and safe milk supply in its relation to the public health, and I stressed the desirability of the appointment of a qualified full-time dairies inspector. The Medical Officers of Health of the two cities gave us every assistance during the course of the survey and their courtesies were greatly appreciated.

Water Supplies

The reports received from the Sanitary Engineering Division following their engineer's inspections of the water chlorination plants have kept me in touch with the general efficiency of each municipal water purification plant in the district. I would recommend that similar reports be forwarded to the District Officers of Health following the routine inspections of milk-pasteurization plants.

The annual inspection of the water supply of the Village of Nipigon was made in the month of August with Mr. C. P. Robins (from the Sanitary Engineering Division). Conditions were found much the same as during previous years, except that the gradual clearing of the forest growth from the watershed will eventually compel the local authorities to obtain the village water supply from some other source as the present source is fortunately drying up.

Routine Following Receipt of Laboratory Reports

The work in connection with investigations following the receipt of laboratory reports was carried on as usual throughout the year. This work would have been impossible without the services of an efficient office stenographer. It included the notifying of Great Lakes steamship companies regarding the results of analyses of all water samples indicating pollution of the water supplies on the boats from which the samples were received at the laboratory. Consultations with practising physicians from whom blood specimens for Widal test were received at the laboratory, and notifications sent to local Medical Officers of Health completed this feature of the general office routine.

The problem of public health supervision in District No. 7 is complicated by the extent and physical conditions of the district, also by the distribution of population which determines the number of local municipalities with local

health machinery. From 20 to 25 per cent. of the population in the district is resident in territory without municipal organization and not under the jurisdiction of local health machinery. The sanitary supervision of these unorganized areas is a responsibility of the Provincial Sanitary Inspectors; and additional Inspectors should be assigned to the unorganized areas, particularly during the summer season when summer resorts and camps are at the height of their popularity. The summer resort area at the northern end of the Lake of the Woods is only one of the potential public health risks created by the growing appreciation of the district as an ideal summer playground.

The entire lack of sanatorium accommodation in the district for indigent and advanced cases of tuberculosis is a cause of hardship to those unfortunates who are compelled to travel many hundreds of miles from their homes in order to obtain admittance to the nearest sanatorium in the Province of Ontario. So far as I am aware there is no sanatorium between Gravenhurst and the Manitoba boundary.

The district public health nursing service is an important branch of public health endeavour, particularly in the outlying areas. It is difficult to see how there can be any serious attempt at public health education without the assistance of the Public Health Nurse; and in pioneer communities the nurse meets a need that may not be adequately appreciated in the older and wealthier sections. In the distribution of the public health nursing service throughout the Province the unorganized districts would appear to be entitled to prior consideration. The provision of local health machinery in rural municipalities (local Board of Health and local M.O.H.) and the absence of similar machinery in adjoining unorganized agricultural townships that have been thrown open for settlement results in a lack of uniform local public health supervision and control throughout the district. From twenty to twenty-five thousand people are resident in territory without municipal organization in the Districts of Kenora, Rainy River and Thunder Bay. As it takes more than eighteen hours for the C.P.R. Imperial Limited to travel through District No. 7 from east to west, it is needless to comment further regarding the difficulties attending the local health supervision of the population resident in the unorganized areas.

During the year I have received every co-operation and courtesy from the Director of the Branch Laboratory in Fort William, from the District Provincial Sanitary Inspector and the District Public Health Nurses, also from the office and laboratory staff.

DISTRICT No. 8

H. W. Johnston, D.O.H.

I have the honour to submit the following summary of the work of the Department as carried on in District No. 8 during the year 1928.

Communicable Disease Control

In reviewing public health work in District No. 8 for the year 1928 it must again be admitted that too great a proportion of time and effort have had to be given to supervision of communicable disease. There is some satisfaction, however, in being able to report that with the exception of the large number of

cases of influenza occuring at the end of the year, there was no wide-spread epidemic which at any time threatened to develop to serious proportions.

Typhoid fever has been more prevalent than usual in the northern sections of the district. Reports have been received in forty-seven cases distributed through communities as follows: Hearst, 15; Gogama, 10; Cockburn Island, 7; Massey, 5; Thessalon, 4; Sault Ste. Marie, 4; Foleyet, 1; Silverwater, 1. In the area surrounding Hearst it has not been possible to determine a common source of infection. Cases are evidently due to unknown carriers and the water supply through the flat country and along the line of the railways is generally of a poor quality. The Town of Hearst is very urgently in need of an adequate municipal water supply and system of drainage and sewage disposal.

The cases of typhoid at Gogama and Massey were apparently from a common source of infection in Gogama from where occasional cases have been reported for some eight years. The group reported from Thessalon, Sault Ste. Marie and Cockburn Island also indicated a common source of infection.

Smallpox has not been a serious problem during 1928. Three Indian families, one lumber camp employee and an employee of the Provincial Forestry Branch at Peterbell constituted the largest group of cases. Isolated cases were also investigated at Hearst, Whitefish and Dalton Mills.

In December, Sault Ste. Marie developed an outbreak of diphtheria which for a while caused the local authorities some anxiety. A number of mild cases were discovered in schools during routine inspections by School Nurses. Laboratory reports on swabs were positive, and following a general examination of throats in the section of the city involved, eighty-four carriers and clinical cases came under observation. It might be of interest to note that investigation revealed an early case where a slip in routine had allowed a family to return to school without release swabs after a clinical case had been treated in the home.

District No. 8 has appreciated the assistance received from the Department's Chest Clinic during 1928. One full week was given to Sault Ste. Marie during the winter and two weeks to the rural sections immediately after the Toronto Exhibition. Owing to insufficient preparation in publicity and organization the first week in the smaller centres did not reach as many cases as might be desired, and it was not until the area had been covered that the local physicians and the public realized the value and necessity of the service offered. During the second week, which was devoted to Manitoulin Island, the time available to the clinic staff was fully occupied. The chest clinic rendered valuable service in arousing interest in tuberculosis control, in assisting the physicians in diagnosis and in stressing the value of early scientific treatment.

During the year eight cases of tuberculosis from unorganized territory in District No. 8 were certified for sanitorium treatment at the expense of the Department.

The following list indicates the number of cases of communicable disease tabulated from weekly reports of municipalities:

Cerebro spinal meningitis	1	Anterior poliomyelitis	1
Chickenpox	39	Scarlet fever	62
Diphtheria	54	Smallpox	2
Gonorrhoea	10	Syphilis	2
Influenza	23	Rabies	1
Measles	1	Tuberculosis	6
Mumps	215	Typhoid fever	3
Pneumonia	13	Whooping cough	33

The above tabulated report compiled from the weekly reports of the Secretaries of the local Boards of Health does not accurately indicate the incidence of communicable disease. It would probably be possible to correct the discrepancy to a considerable extent if responsibility for tabulation of weekly reports were placed in the office of the District Officer of Health. This would necessitate a change in the regulations to provide that weekly reports be sent by municipalities to the District Officer of Health. Being in more direct contact with the municipalities he would be in a position to compare routine reports with the information available through other sources. Direct reporting to the district officer would also be valuable in making it possible to take more prompt action in case of any threatened epidemic.

The provision which has been made by the Government for a commission for emergency relief in Northern Ontario will meet an urgent need among pioneer settlers. Many communities, some under municipal organization, have had serious setbacks owing to the cessation of active mining or lumbering activities. The result has been that no public local assistance has been available for indigent relief or necessary medical attention. The commission may now be in a position to offer relief in cases of unusual distress.

Owing to three new municipalities having been organized in District No. 8, and an equal number of Boards of Health having been created, co-operation has been given in outlining the duties and responsibilities of these organizations. The new municipalities are Hornepayne, Baldwin, and Killarney.

Public Health Education

The public health nursing service continues to be an outstanding feature of Departmental activity throughout the district. Miss Johnson with headquarters at Sudbury, in charge of the work in the eastern section of the district, and Miss Grenville in the western section have been in charge of the combined demonstration and general public health nursing service. Miss Squires and Miss Hopper supplemented the work on Manitoulin during the summer and autumn. Miss Nealon assisted in general work throughout the district, and Miss Vrooman conducted a most comprehensive demonstration and service programme in the Town of Chapleau during the winter months.

A permanent municipal nursing service would be established in Chapleau except for a present tax rate of some sixty-six mills which causes the local authorities to hesitate to add additional expense.

Sanitary Supervision

Assistance was given the Village of Hilton Beach in arranging for satisfactory disposal of garbage in the municipality of the Township of Hilton.

Difficulty has also arisen between the City of Sault Ste. Marie and the residents of Korah Township. The difficulty was due to a garbage contractor operating an incinerator which was inadequate to take care of the quantity of garbage that was being collected in the early spring.

In the Town of Hornepayne nuisances were caused from septic tanks and cesspools which were not capable of handling the amount of sewage to be disposed of. The condition was aggravated by the boggy nature of the soil in certain areas of the townsite and a main water course through the centre of the better settled portion of the town.

Considerable time has been given in an endeavour to have sanitary conditions improved in the Town of Hearst. The level, flat country in which the town is situated, and the heavy clay subsoil, make natural drainage difficult and wells mostly used for water supply are particularly liable to contamination. Sewers from properties owned by the Provincial Government and the National Railway empty into the river at the upper side of the town and are an added source of danger from pollution of the stream. A sanitary survey made recently recommended that an adequate system of water supply and sewage disposal be installed.

During the year the Town of Blind River has arranged for the installation of a modern water supply and sewerage system. Water is being secured from deep wells. The services are now in course of installation and some properties are receiving the new water supply.

It is found that Public School Boards in rural communities are slow in complying with recommendations of Medical Officers of Health and School Inspectors in regard to improved sanitary conveniences and safe water supplies in schools. It has been suggested that the Department of Health take some steps to co-operate with the local health officers in urging the School Boards to comply with the requirements as outlined in annual reports forwarded to the Department of Health.

Attention has again been given to the problem of securing satisfactory milk supplies in the main centres of population.

The City of Sault Ste. Marie has had the matter of a pasteurization by-law in hand for several years. On different occasions the local Board of Health has asked the City Council to introduce a by-law to provide for a satisfactory milk supply. The proposition was opposed by the local Women's Council and a section of the milk producers. As a result no action has been taken to comply with the recommendations of the local Board of Health.

Co-operation has also been given the Towns of Chapleau, Hearst, Hornepayne, Blind River, and Espanola in securing improved methods of handling milk.

Complaints were received regarding the unsatisfactory condition of empty ice cream cans being returned to the ice cream manufacturing centres from the dealers at a distance. A notice sent to ice cream dealers and restaurants resulted in a decided improvement.

Dental Service

During the summer the district received the benefit of the newly inaugurated system of dental service provided by the Dental Hygiene Division. This service as it develops will provide greatly appreciated relief for outlying sections of New Ontario where dental treatment has not been available. Owing to the amount of territory calling for this attention treatments given were probably not as thorough as might be desired. Once the ground has been covered and information secured regarding the value of the service, it will be possible to give more detailed attention to individual cases.

Press notices indicating that voluntary health organizations were preparing for a programme of public health education stressing the need for organized health units throughout the Dominion appears to forecast the next advance in public health.

An estimate of public opinion would indicate that Government action to further such a programme would be generally approved as providing possibilities for marked progress in the promotion of public health.

SIXTY-FIRST ANNUAL REPORT

OF THE

INSPECTOR OF PRISONS AND PUBLIC CHARITIES

UPON THE

Hospitals for the Insane Feeble-minded and Epileptic

OF THE

PROVINCE OF ONTARIO

Being for the Year ended 31st October

1928

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INTRODUCTION

It is felt that a brief word as to the various Mental Institutions operated by the Province might be of general interest, and accordingly the individual Institutions will be dealt with herein very briefly and in a general way. Various improvements have been made over a period of a few years past and certain items are mentioned herein which may prove of interest.

The Ontario Hospital at Brockville is an Institution constructed on the Cottage Plan, beautifully located on the banks of the St. Lawrence and commanding an excellent view of the river and the American shore. The population at date of this report amounted to 875 persons. There are several Cottages including the Central Administrative Unit and the building known as Elm Grove Cottage, the latter being a comparatively new piece of construction embodying many modern architectural features and serving as a Reception Unit. It might be mentioned that in recent years a Pathological Laboratory has been installed, a paint shop and work shop have been constructed and much remodelling has been done with respect to patients' lavatories. An important piece of construction consists of a new laundry building which is illustrated herein. This building is of one storey construction and is equipped with laundry machinery of the most modern type and embodying all possible safety devices. The building was designed by officials of the Public Works Department after consultation with the staff of the Provincial Secretary's Department and the installation was completed under the direction of the Public Works Department.

The Superintendent of the Ontario Hospital at Brockville is Dr. W. M. English, for many years Superintendent of the Ontario Hospital, Hamilton.

The Ontario Hospital located at Cobourg has a population of 415, the patients at this point all being females. This Institution during the war period was loaned to the military authorities who extended the buildings by the construction of two wings of frame and stucco construction. A new boiler house has been erected and equipped by the Public Works Department. Having regard to the fact that the original buildings were old when taken over for the purposes of a Mental Hospital and having regard to the fact that the buildings erected by the military authorities were of rather fragile construction, rather numerous repairs have been necessary. Amongst other items might be mentioned the overhauling of patients' lavatories, the installation of a new cold storage plant with artificial refrigeration, the remodelling of the patients' dining room and the remodelling of the existing laundry. A garbage incinerator has been installed making for a quick and sanitary method of disposing of waste, and the Superintendent's residence has been connected by a steam line to the central heating system.

The Superintendent of the Cobourg Hospital is Dr. W. C. Herriman, for many years Medical Director of the Ontario Hospital, Orillia.

The Ontario Hospital, Hamilton, has a population of 1,216 male and female patients. This Institution is located on the summit of the mountain commanding a beautiful view of the City of Hamilton and of the surrounding district. Among improvements which have been made in recent years at this Institution

might be particularly mentioned a new dental office and a new X-ray division. Many patients' lavatories of an obsolete type have been thoroughly modernized. A small transformer house has been erected to house certain electrical equipment, this piece of work being taken care of entirely by the Institution staff, which staff has also erected a new porte-cochere at the main entrance of the Institution, replacing the old wooden structure which had reached an advanced stage of decay. The main kitchen has been entirely overhauled and partly re-equipped. A number of exit stairs have been fire-proofed and generally modernized. Additional continuous baths have been installed, thus affording additional facilities for hydro therapy treatment. The main entrance gates have been rebuilt and the Institution fencing and ground lighting has been greatly improved. A new pasteurizing outfit has been installed. The general appearance of the Institution has been considerably improved by reason of a vigorous painting programme carried on by members of the Institution staff.

An Infirmary Unit is under construction by the Department of Public Works. This unit is designed to house fifty patients and will give the opportunity of largely consolidating the special treatment rooms of the Institution. The Dental Office and the X-ray Department will be transferred to this building when completed and the building will embody the most modern hospital features.

The Superintendent of the Ontario Hospital, Hamilton, is Dr. J. J. Williams,. for many years in charge of the Hospital for Epileptics at Woodstock.

The Ontario Hospital at London cares for a population of 1,398. The Institution is located on a beautiful property lying in the easterly part of the city. The hospital buildings consist of the main building, a separate reception building and a large building for acute cases. Amongst recent improvements in equipment might be noted the installation of a modern X-ray outfit and a modern automatic telephone system. To assist in preserving the tremendous quantity of fruit and vegetables produced at the Institution farm, a canning and evaporating plant has been built. The laundry has been completely modernized and fitted throughout with new machinery. New dental equipment has been purchased and installed. The accommodation has been somewhat increased by the erection of sun rooms affording additional accommodation of a particularly desirable type. Difficulties incident to water suply have largely been overcome through the erection of a large elevated water tank. A fire stair has been installed in the main building and some architectural features are being added to the entrance greatly improving the appearance of the main building and giving additional staff quarters and additional office accommodation.

The Superintendent of this hospital is Dr. W. J. Robinson.

The Ontario Hospital at Kingston has a population of 698. One of the larger buildings for the housing of patients, known as South Cottage, has been completely renovated and modernized. The laundry has been entirely remodelled and obsolete and worn-out machinery has been replaced. The main building has been entirely re-roofed with copper. Extensive general repairs too numerous to mention have been made throughout this hospital.

The lands and buildings of the Mowat Sanatorium, lying about one-half mile north of the main hospital, have been purchased and have been almost entirely remodelled. This unit when completed will give modern accommodation amongst the most pleasant surroundings for some 300 additional patients; accommodation which is very badly needed.

The Superintendent of the Ontario Hospital, Kingston, is Dr. Edward Ryan.

The Ontario Hospital at Penetang has a population of 388. This hospital is well located on the shores of the Georgian Bay adjacent to the town of Pene-

tang. The buildings are of stone construction and while old, are in good condition and are quite suitable for the purpose for which they are now used. The interior of what is known as Cottage B, housing sixty patients, has been completely overhauled and modernized. The cold storage plant has been rebuilt, a new ice house erected and the patients' dining-room has been thoroughly renovated. A new Dental Clinic has been installed and is operating satisfactorily. Again in the case of this Institution very many general repairs have been made and no effort has been spared to modernize the existing plant.

The Superintendent is Dr. W. K. Ross.

The Ontario Hospital at Whitby is constructed on what is known as the Cottage Plan. The Institution includes sixteen cottages, each capable of housing sixty patients, two acute buildings, two infirmaries, three large central Kitchens and a large administration and reception unit. It might also be mentioned that the Nurses' Homes and the numerous houses around the Institution for members of the staff are of the most modern construction. The site comprises some 640 acres located to the southwest of the town of Whitby on the shores of Lake Ontario. The building site alone occupies approximately seventy acres. The most important item of alteration in connection with this Institution lies in the remodelling of the heating system. The buildings are all heated from a central power house, and owing to various difficulties which developed it was found advisable to connect the various units by means of tunnels. The excavation was taken care of by inmates of the Ontario Reformatory, Guelph, who were temporarily transferred to Whitby for this work. The placing of all pipe lines in these tunnels makes same readily accessible for repairs and already a substantial saving is being effected in heating costs. By using prison labour in this connection the cost was kept at a minimum.

New mechanical refrigeration equipment has been installed in kitchens Nos. 1 and 2, replacing the former system which was worn out. A substantial amount of under draining has been done in connection with the farm which should greatly increase production. Other items of repair too numerous to mention in detail have been taken care of. The Institution which is regarded as being one of the finest in North America is under the superintendency of Dr. G. H. Stevenson, formerly Assistant Superintendent of the Ontario Hospital, London.

The Ontario Hospital, Mimico, is located on the shores of Lake Ontario, the population being 655. The hospital is constructed on the Cottage Plan, the buildings all being connected by tunnels. Amongst items of repair which have been taken care of at this Institution might be mentioned the installation of a new pasteurizing machine, the remodelling of the milk room, the remodelling of the main kitchen, the installation of a new cold storage plant in the stores building, and numerous other items which need not be mentioned in detail. An arrangement was entered into whereby sewage from the Institution is being taken care of by one of the adjoining municipalities, thus eliminating the old sewage plant formerly operated on the Institution grounds. The water supply is also now taken from an adjoining municipality instead of being provided through the hospital pumping station as formerly.

A programme of complete repair and modernization in the cottages is well under way and the work of rehabilitation is being pressed as rapidly as possible.

The Superintendent of the Ontario Hospital at Mimico is Dr. F. S. Vrooman, formerly Superintendent of the Ontario Hospital, Toronto.

The Ontario Hospital, Toronto, caring for a population of 829, has during recent years been completely remodelled. While this Institution is old, its features now compare very favourably with those observed in institutions constructed in recent years.

The Superintendent is Dr. H. A. McKay, formerly Assistant Superintendent at the Ontario Hospital, Hamilton.

The Ontario Hospital at Orillia, at date of this report, has a population of 1,385. This Institution cares for the mentally defective. The hospital is located on the shores of Lake Simcoe a short distance from the town of Orillia. In this Institution every attempt has been made to provide education and occupation for the patients. The patients at the Institution are given a public school education, where it is possible for them to benefit from teaching. Many of the patients are engaged in agricultural work about the farm; others are employed in the shoe-making department and in the tailor shop; others are engaged in assisting the various artisans around the Institution. The industrial unit recently erected has made for a consolidation of the industrial operations and affords the patients in large numbers the opportunity of following pleasant and profitable lines of work under excellent working conditions.

Special mention might be made of the recent addition to the Institution which addition is used largely as an Infirmary. This addition is of very modern hospital construction and fills a need which was felt for many years.

It is found that a certain number of the patients at this Institution may be trained to a degree which enables them to take their places in domestic service, on farms and in industry.

The Superintendent of the Orillia Hospital is Dr. B. T. McGhie.

The Ontario Hospital, Woodstock, is built on the Cottage Plan and houses 189 epileptic patients. Mention might be made of the recent installation of new laundry equipment, the installation of a new dental outfit, and the installation of a new cold storage room with artificial refrigeration. A vigorous programme of painting and repair has been carried out and the hospital presents a very creditable appearance.

The Superintendent is Dr. T. D. Cumberland.

Special mention might be made of the fact that a thorough survey was made as to dental equipment, etc., at all the hospitals. As a result of this survey in a number of cases the Dental Clinic has been moved to new quarters and new equipment has been installed as required. Each hospital now has a thoroughly equipped dental office in charge of a competent part-time dentist. In this connection appreciation should be expressed with respect to the kindly assistance and advice rendered by the Department of Health and more particularly by Dr. F. J. Conboy, Director of Dental Services for the Province.

Improvements have been made in the Institution Laboratories; in some cases new quarters having been provided and in all cases considerable additions to the equipment having been made.

In the Occupational Therapy Department some advances have been made. For a number of years occupational therapists have been employed in our hospitals. In recent years to assist in this field the University of Toronto has inaugurated a two-year course in Occupational Therapy and graduates in considerable numbers have been employed from this source in the Provincial Hospitals. While for many years patients have been given pleasant and useful employment around the Institutions whether in the farm, garden or around the

buildings, yet the employment of trained aides has proven to be of great assistance as a therapeutic measure and has been of very real assistance to the medical staffs in effecting cures.

The medical staffs have been strengthened and in all the hospitals it is considered that these staffs are now at a proper strength.

The Bursars in the Institutions are giving efficient and loyal service and are more and more relieving the Superintendents of matters relating to business detail, thus giving the Superintendents greater opportunity to devote their labours more intensively to the medical side of the Institutions.

The adoption of the recent general classification of the public service has been of very material assistance. This classification provides for a graduated scale of salaries with respect to each office in the service. The result is that the official who carries on his duties in a satisfactory manner is recognized and to a large measure the discontent and uneasiness prevailing at times amongst the Institution staffs as to their financial future has in very great measure been removed.

To return again for a moment to alterations and repairs to the various buildings, two or three special features are deserving of mention. In connection with the rehabilitation of laundries, every effort has been made to provide for an abundance of natural light and fresh air. The machinery which has been installed is of modern construction and is almost entirely direct motor driven. Unsightly belts and pulleys and long runs of shafting are eliminated, adding immeasurably to safety. The machines installed embody all possible safety devices.

The installation of artificial refrigeration plants has proven to be of great comfort and convenience at a number of the Institutions. At certain of the Institutions the supply of natural ice was uncertain and in addition the labour of harvesting was considerable and the cost of storage rather high. Further, the use of the artificial refrigeration eliminates much dirt and generally it is felt that the policy which has been adopted is a decided step in the right direction.

It might be mentioned that the Fire Marshal has been kind enough to conduct a survey of the Institutions with a view to having the fire hazard reduced to a minimum. His advice has been of very material assistance to the branch of the Maintenance Architect. One feature which might be particularly mentioned is that of the construction of numerous fire stairs throughout the Institutions. The old type of open stairway is being gradually eliminated. It is replaced by a fireproof well running from the basement to the top of the building, entered by fireproof doors. This well contains a fireproof stair which serves all the purposes of an ordinary stair for every-day use and which makes an ideal emergency exit in case of fire.

Credit should be given to the Institution staffs representing the various trades for their co-operation with the branch of the Maintenance Architect. The Institution carpenters, plumbers, engineers, painters, tinsmiths and representatives, in fact, of all the allied trades, have given splendid co-operation and service. Most of the members of these staffs are men of long Institution experience and their familiarity with hospital conditions enables them to work to the best advantage with the patients. The patients in turn not only do a great amount of useful work in assisting the various trades, but their efforts in this connection are of real healing value to themselves.

The work which is carried on on the Institution farms is under the general supervision of Mr. Robert Beatty, Farm Director. The Farm Director is continually in touch with the various Institution farmers. He renders valuable

assistance in planning the general conduct of operations. There is a free interchange of products as between the various farms and also between the Hospitals, the Reformatory, and the Industrial Farm organizations. Where there is a surplus of, say, apples or potatoes, at one point such surplus is transferred to some other Institution where there may be a shortage in this particular article.

Valuable assistance is rendered to the hospitals through industrial operations at the reformatories. Particular mention might be made of the clothing manufactured at the Andrew Mercer Reformatory and generally used throughout the hospitals for the benefit of patients who must be clothed at the public expense.

The appointment of two Placement Officers might be mentioned. It is the duty of these officials to secure positions for patients ready for discharge who need such assistance; to investigate with respect to cases for which admission is required, and also to assist in connection with the collection of revenue.

With regard to the collection of maintenance it might be mentioned that the system has been thoroughly overhauled resulting in a very considerable increase of revenue accruing to the Department.

On October 31st, 1928, the population of the Ontario Hospitals was 10,084.

H. M. Robbins,
Deputy Provincial Secretary.

A. L. McPherson,
Inspector of Prisons and Public Charities.

THE ONTARIO HOSPITAL, COBOURG

November 21st, 1928.

Mr. H. M. Robbins,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

SIR:

I have the honour to transmit herewith the annual report of the Ontario Hospital, Cobourg, for the year ending 31st October, 1928.

In addition to the statistical report, I may say that we have had a fairly active year in general repairs and additions. The walls of the west portion of the entrance to the assembly hall, which had become quite defective, were rebuilt. The laundry was enlarged by appropriating that part of the building formerly used as a garage, and additional washers, an extractor and mangle have been installed. A new metal garage has been erected. A small brick building was put up as a paint shop and storage for all such inflammable material as had been kept in the basement under the wards. A covered brick and cement approach to the kitchen was built and affords temporary sanitary storage for all garbage. The incinerator erected adjacent to the boiler room is serving a very useful purpose in consuming a great variety of rubbish which had a tendency to accumulate about the place. The class room has been completely done over, a comfortable and much appreciated change. Our electric light plant has been completed so that we are now not likely to be caught short on those occasions when the Hydro line fails us. A new hot water system was added to the boiler room equipment which now gives us an ample supply for the continuous baths and all domestic purposes. The bath rooms and lavatories have been renewed and the floors in these rooms which had become defective have been replaced by mastic flooring. A considerable amount of fencing has been done and work has been commenced on improvement of the grounds.

I wish to express my thanks for the many kind considerations extended to us on all occasions of difficulty and perplexity.

I have the honour to be,
Sir,
Your obedient servant,
W. C. HERRIMAN,
Superintendent.

ONTARIO HOSPITAL, WOODSTOCK

November 20th, 1928.

Mr. H. M. Robbins,
Deputy Provincial Secretary,
Toronto, Ontario.

SIR:

I beg to present the annual return of the Ontario Hospital, Woodstock, for the year ending October 31st, 1928.

I have the honour to be,
Sir,
Your obedient servant,
T. D. CUMBERLAND,
Superintendent.

ONTARIO HOSPITAL, ORILLIA

November 20th, 1928.

Mr. H. M. Robbins,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

SIR:

I beg herewith to submit the annual report of the Ontario Hospital, Orillia, for the year ending October 31, 1928.

Among the various activities of the hospital during the year two things stand out as materially affecting the standard of efficiency of the institution both as a medical centre and as a school for the training of subnormal children. I refer especially to the organization of a training school for nurses and the reorganization of our academic and trade schools.

Under the direction of Miss Phyllis Stubley, Superintendent of Nurses, the first class of seventeen pupil nurses has already completed half of the first year's studies and the value of the services of these nurses in caring for our sick and helpless patients is already quite apparent.

Through the co-operation of the Department of Psychology, University of Toronto, a psychological survey of our patient population was undertaken during the year and 453, approximately one-third of our patient strength, were properly graded as to intelligence quotient and are now receiving instruction in our school. The programme of the school was changed in order to bring knowledge more closely into contact with life and make it socially effective. Judged by the fact that twenty-eight pupils who were placed on probation from the school during the year are satisfactorily adjusted in the community and earning their own living, the new school plan is likely to be a success.

The addition to our staff of two medical officers, supervising nurses, physical instructor, manual training instructor, psychometrist and a dietitian, has greatly increased the efficiency of the institution and permits of more individual care, scientific study and intensive treatment of our patients with a resulting improvement in their health and general outlook on life.

Provision was made during the year for members of our staff to improve their knowledge in particular subjects affecting this institution. Dr. W. C. Hamilton was the recipient of a Rockefeller fellowship and spent six months studying the methods followed in various American centres in the care and training of subnormal children. Dr. S. O. Morris also spent a period at the Mountain Sanitarium, Hamilton, studying tuberculosis in children with a view to segregating any suspected cases in our hospital population here. Miss Dorothy Hale, our school principal, while spending her summer holidays in the British Isles, visited many of the institutions there, bringing back many helpful suggestions for the improvement of our school.

Throughout the year we have received the hearty co-operation and support of the health authorities, children's aid societies, social agencies and others interested in the under-privileged child, this notwithstanding the fact that our accommodation has been entirely inadequate to cope with the ever increasing demand for institutional care and training of these cases.

Much has been done, under your direction, during the year to improve the hospital property, and I wish to thank you for your kindly advice and assistance in connection with the many details of administration.

I have the honour to be,

Sir,

Your obedient servant,

DR. B. T. MCGHIE,
Superintendent.

THE ONTARIO HOSPITAL, LONDON

Re Annual Report.

November 29th, 1928.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto 5, Ont.

DEAR SIR:

I am enclosing herewith our annual statistical report for the year ending October 31st, 1928.

Yours very truly,

W. J. ROBINSON,
Superintendent.

THE ONTARIO HOSPITAL, GUELPH

November 30th, 1928

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

DEAR MR. ROBBINS:

Enclosed please find our annual report for year ending October 31, 1928. We hope that you will find it correct in every detail.

Yours very truly,

N. C. WALLACE,
Medical Officer.

THE ONTARIO HOSPITAL, MIMICO

December 17th, 1928.

Re Annual Report.

The Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ontario.

SIR:

I herewith beg to enclose our annual report for year ending October 31st, 1928.

I have the honor to be,

Sir,

Your obedient servant,

ALEXANDER M. MUFRAY,
Bursar.

THE ONTARIO HOSPITAL, TORONTO

December 27th, 1928.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

DEAR SIR:

Enclosed herewith please find annual report of this hospital for the year ending October 31, 1928.

Yours truly,

H. A. McKAY,
Superintendent.

THE ONTARIO HOSPITAL, HAMILTON

November 19th, 1928.

Re Annual Report.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

SIR:

I have the honour to submit to you the fifty-third annual report for the Ontario Hospital, Hamilton, for the year ending October 31st, 1928.

I have the honour to remain, Sir

Your obedient servant,

J. J. WILLIAMS,
Superintendent.

THE ONTARIO HOSPITAL, WHITBY

October 31st, 1928.

Mr. H. M. Robbins,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

Dear Sir:

I have the honour to make the ninth annual report of the Ontario Hospital, Whitby, for the year ending October 31st, 1928, with statistical tables attached.

Treatment

Our treatment facilities have been used to the utmost during the year. In addition to such general measures for improving the health by removal of focal infection, attention to the teeth, diet, occupation, good nursing and personal contact, we have also sought to utilize newer means of treatment in special groups. We have continued the use of tryparsamide in general paresis with very successful results. In the epilepsies, in addition to general measures, we have used luminal in sufficient dosage to materially reduce the number of seizures. and in selected cases have placed such patients on a ketogenic diet, which we feel has been helpful. Towards the latter part of the year we treated a few advanced cases of dementia praecox by what is known as the Aseptic Meningitis Treatment and plan to extend this treatment during the coming year.

Full advantage has been taken of the recreation hall by opening an occupational therapy workshop on the lower floor for the treatment of more recent admissions who need intensive personal attention. This workshop was opened in this building, so it could be in close contact with the recreational features, and we feel it is serving a very valuable purpose. A library and reading room were opened next to the workshop and in the ten months during which it has been operating, 6,959 books have been issued; of this number 4,329 were issued to patients and 2,630 to members of the staff. Daily papers and magazines are also available.

The bowling alleys were re-conditioned; a billiard table was installed and another has been ordered; a badminton court and a volley ball court have been laid out on the floor of the auditorium; a canteen has been opened as a convenience to patients and staff, where soft drinks, tobacco and candy can be purchased. The profits from the canteen have been used for the upkeep of these recreational facilities and to purchase attractive pictures for some of the patients' sitting rooms. Physical training classes have also been started. Weekly dances, moving picture shows and religious services are also held in the auditorium. This building is also open every night until 10 o'clock for the use of staff and serves a very useful purpose as club rooms and for recreation, and makes for much more contented and loyal employees.

Repairs and Alterations, etc.

Considerable painting has been done during the year; the new heating mains have been completed; further improvements have been made to the grounds, and two of the old frame buildings used during construction days have been demolished. The two temporary buildings known as Dormitories

Nos. 1 and 2, erected by the Military during the war, have been utilized for special work. No. 1 Dormitory is now used entirely for housing of staff—the lower floor being occupied by junior nurses and the upper floor by the domestic staff. Dormitory No. 2 is now being devoted entirely to occupational therapy, with the exception of one large room, which we have taken as a nurses' class room. The occupations in this building will be for convalescent cases and patients who have special aptitudes for the type of work that can be done in this building.

Staff Changes

On October 31st, 1927, Dr. J. M. Forster, superintendent of this hospital since its inception, resigned on account of ill health. He was succeeded in the superintendency by Dr. G. H. Stevenson, formerly assistant superintendent at the Ontario Hospital, London.

Dr. Wade was transferred to the Industrial Farm at Burwash and Dr. O'G. Lynch was transferred to the Ontario Hospital at Brockville as assistant superintendent on November 1, 1927. Dr. Frederick LeDrew was appointed to our staff on October 4, 1927, and was transferred to the Ontario Hospital at Cobourg on December 31, 1927. Dr. S. R. P. Montgomery was appointed to the medical staff on February 22, 1928, and Dr. J. E. Tilden was appointed on August 2, 1928.

On October 1, 1928, an exchange of stewards took place between this hospital and the Brockville Hospital, Mr. J. M. Short going to Brockville and Mr. J. J. Kiernan coming here.

In conclusion I should like to express my appreciation of the co-operation I have received from the entire staff, all of whom have real pride in our hospital and the work we are attempting to perform.

I have the honour to be, Sir,

Your obedient servant,

G. H. Stevenson,
Superintendent.

ONTARIO HOSPITAL, BROCKVILLE

November 16th, 1928.

Re Annual Report.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto 5, Ontario.

Dear Sir:

Under separate cover I am forwarding to you the annual statistical report of this hospital for the year November 1, 1927, to October 31, 1928.

Your obedient servant,

W. M. English,
Superintendent.

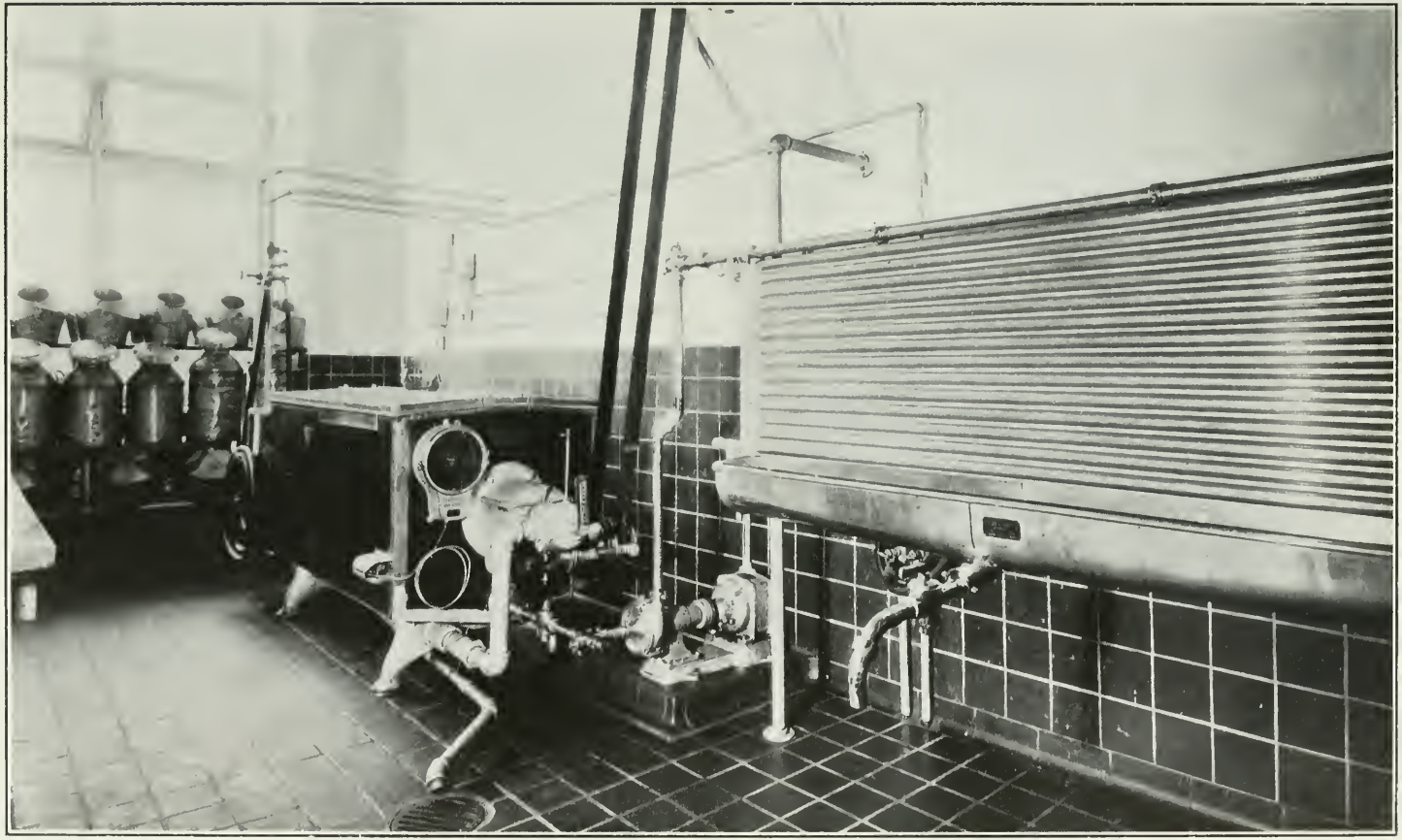
Elmgrove Cottage, Ontario Hospital, Brockville

Note sun-rooms with Southern exposure

Exterior view of the new laundry building erected 1928, Ontario Hospital, Brockville, illustrating the substantial but economical type of one-storey building, adopted by the Government for carrying on the laundry work of the institutions under its care.

Interior view of the new laundry building, Ontario Hospital, Brockville. This building, with its tile floors and tile dados, its abundance of light and ventilation and its modern machinery is typical of the healthful and sanitary working conditions being provided by the Government for sterilizing and washing and finishing all soiled linen and washable clothing at each of the institutions. This laundry work is done by patients under the careful supervision of a small but capable staff.

Interior view of the patients' sitting room at South Cottage, Ontario Hospital, Kingston. This room, with its sanitary red tile base around the plaster walls, its waxed floor of brown battleship linoleum and its abundant natural and artificial light and homelike furnishings, illustrate the care taken in providing pleasant and restful living conditions suitable for the recovery of mental patients.



Interior view of the milk pasteurizing and cooling room, Ontario Hospital, London. The tile floor and dado, the painted plaster walls and abundant natural light and ventilation and the up-to-date mechanical equipment of this installation, are typical of the sanitary surroundings provided for safeguarding the handling of the milk supply at the various institutions.

Interior view of a typical patients' dining room, Ontario Hospital, Whitby. This is one of eight similar rooms forming a dining centre for a group of eight cottages. This accommodation is provided for each sex and attention is called to the sanitary and homelike surroundings. The furniture shown is made at the Ontario Reformatory, Guelph.

Interior of a typical kitchen, Ontario Hospital, Whitby, for each dining centre. The red tile floor and dado and painted plaster walls and ceiling, the abundant light and ventilation and the modern mechanical equipment illustrate the care taken to safeguard the preparation of food for both patients and staff.

Interior view of Occupational Therapy Room, Ontario Hospital, Whitby. In these pleasant surroundings patients are encouraged to do a large variety of hand work under capable instruction and supervision. The furniture shown is made at the Ontario Reformatory, Guelph.

Interior view of a typical Infirmary Ward, Ontario Hospital, Whitby. The bright and pleasant and sanitary surroundings here illustrated are conducive to quick recovery of sick patients. The beds and other furniture shown are made at the Ontario Reformatory, Guelph.

Interior view of the Recreation Hall, Ontario Hospital, 999 Queen Street West, Toronto. This is typical of the accommodation furnished at the various institutions for the patients' recreative needs. Here are held the various concerts, dances, motion pictures, and vaudeville entertainments given periodically to all the patients.

Interior view of the dental operating room, Ontario Hospital, 999 Queen Street West, Toronto. This is typical of the sanitary surroundings and modern mechanical equipment installed for the care of patients' dental requirements at the various institutions.

TABLE No. 1

Contains information in regard to the date of opening of the Hospitals, the acreage, and the real estate value of the property, not including the value of the buildings.

Name of Hospital	Date of Opening	Acreage		Acres in Fruit and Vegetables	Acres in Grain	Acres in Buildings and Grounds	Acres in Bush or not Cultivated	Value of Real Estate
		Owned	Rented					
Brockville	1894	569	.....	40	369	35	125	$64,860
Cobourg	1920	11.58	.....	4.28	.....	7.30	.....	16,500
Hamilton	1876	525	.....	87	364	74	.....	50,000
Kingston	1854	257.53	.....	13	154.53	90	.....	68,600
London	1870	505	14	105	306	70	38	180,000
Mimico	1890	82	.....	34	.....	48	.....	243,500
Orillia	1876	500	30	71	175	30	254	48,000
Penetanguishene	1904	383	.....	20	98	5	260	6,000
Toronto	1846	20	.....	5	.....	15	.....	300,000
Whitby	1920	640	.....	125	365	150	.....	128,000
Woodstock	1906	324	.....	13	224	27	60	24,300
*Guelph	1921	.....	.....	.....	.....	.....	.....	.....
		3,817.11	44	517.28	2,055.53	551.30	737	$1,129,760

*Property comprises East Wing of the Ontario Reformatory. The Hospital owns no property.

TABLE No. 2

Furnishes a summary of the entire staffs at each Institution, together with the kind of work at which they are employed. The Superintendents of the various Hospitals are thereby enabled to make a comparative study of this phase of their operations.

Hospital	Superintendent	Assistant Superintendent	Assistant Physicians	Bursar or Steward and Assistants	Storekeeper	Other Clerks, Stenographers, etc.		Matron and Assistants	Dietitians	Graduate Nurses	Other Female Nurses	Male Attendants	Social Workers	Teachers	Occupational Workers	Kitchen and Dining Room Help		Laundry and Other Domestic Help		Farmers, Gardeners and Assistants	Engineers and Other Mechanical Staff	Other Male Employees	Other Female Employees	Total
						M.	F.									M.	F.	M.	F.					
Brockville	1	1	2	1	1	2	3	....	1	13	58	67	....	....	1	2	6	5	8	9	18	2	2	203
Cobourg	1	....	1	1	....	....	2	1	....	3	26	....	....	....	....	....	3	....	3	1	4	4	....	50
Hamilton	1	1	5	1	1	3	3	1	....	16	47	82	....	....	8	2	11	2	10	11	17	7	2	231
Kingston	1	1	3	1	1	....	4	....	....	2	51	62	....	....	2	3	3	1	4	5	12	3	1	160
London	1	1	3	1	1	2	1	1	1	10	70	73	....	....	3	2	17	2	15	14	26	1	3	248
Mimico	1	1	1	1	1	2	2	1	....	6	36	48	....	....	3	1	7	1	7	5	11	5	....	140
Orillia	1	1	3	1	1	3	3	1	1	6	43	48	....	10	12	2	15	2	6	8	12	2	1	182
Penetanguishene	1	....	1	1	....	1	2	1	....	1	16	14	....	....	....	....	5	1	4	4	5	5	....	62
Toronto	1	1	2	1	1	1	3	1	....	4	64	54	....	....	3	2	9	1	5	1	14	2	1	171
Whitby	1	1	4	2	2	2	3	....	1	11	79	82	....	....	2	6	15	1	12	15	18	3	1	261
Woodstock	1	....	1	1	....	....	2	1	....	....	13	15	....	....	....	2	3	....	1	7	4	2	1	54
Guelph	1	....	2	....	....	....	....	....	....	....	....	15	....	....	....	....	....	....	....	....	....	....	....	18
	12	8	28	12	9	16	28	8	4	72	503	560	....	10	34	22	94	16	75	80	141	36	12	1780

TABLE No. 3

Is the first table dealing with patients and furnishes the Psychoses and Industrial classification. The interest in this table lies in the variation of employment as shown at the different Hospitals.

Hospital	Psychiatric Classification														Industrial Classification											
	Number of Patients Insane		Number of Patients Epileptic		Number of Mental Mental Defectives		Number of Alcoholics		Number of Drug Addicts		Number of Neuro-Syphilitics		All Other Types		Industrial Work		Farm and Garden Work		General Internal Work		General External Work		No Regular Work		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Brockville	440	434	....	....	....	....	....	....	....	....	....	....	....	1	41	75	52	....	137	82	38	65	172	213	440	435
Cobourg	....	386	....	....	....	26	....	....	....	....	....	....	....	....	....	54	....	....	....	224	....	....	....	134	....	412
Hamilton	576	580	....	....	5	2	....	....	....	....	....	....	....	....	71	69	83	....	193	173	55	....	179	340	581	582
Kingston	400	298	....	....	....	....	....	....	....	....	....	....	....	....	43	98	39	....	135	77	94	....	89	123	400	298
London	637	688	....	....	10	2	3	....	1	1	....	....	....	....	75	170	110	....	140	265	100	....	226	256	651	691
Mimico	329	326	....	....	....	....	....	....	....	....	....	....	....	....	13	54	75	....	70	130	30	....	141	142	329	326
Orillia	5	12	61	60	639	607	....	....	....	....	1	....	....	....	215	238	98	....	170	209	14	....	209	232	706	67
Penetanguishene	166	214	....	....	3	3	....	....	....	1	....	....	....	....	29	18	51	....	23	27	....	....	66	173	169	?
Toronto	366	463	....	....	....	....	....	....	....	....	....	....	....	....	16	30	30	....	100	100	150	....	70	333	366	
Whitby	772	761	....	....	....	1	4	....	3	....	....	....	....	....	65	63	90	....	210	230	140	46	274	423	77[illegible]	
Woodstock	21	29	73	66	....	....	....	....	....	....	....	....	....	....	....	....	13	....	35	49	15	....	31	46	[illegible]	
Guelph	111	....	....	....	2	....	....	....	....	....	....	....	1	....	12	....	20	....	13	....	....	....	69	....	11	
	3823	4191	134	126	659	641	7	....	4	2	1	....	1	1	580	869	661	....	1226	1566	636	111	1526	2415	46[illegible]	

[illegible]mber shown as recovered

TABLE

...ement of the population of the Hospitals. It gives the classification of ... and improved in each Hospital, as

	Brockville			Cobourg		
	Male	Female	Total	Male	Female	Total
Patients in hospital beginning of year	405	395	800	.....	388	388
Patients on probation beginning of year	32	25	57	.....	6	6
Total beginning of year	437	420	857	.....	394	394
First admissions during the year	87	82	169	.....	4	4
Read missions during the year	26	19	55	.....	.....	.....
Transfers during the year	.....	.....	.....	.....	44	44
Total admissions during the year	113	101	214	.....	48	48
Total on books during the year	550	521	1,071	.....	442	442
Classifications of admissions:						
By physicians' certificates	103	95	198	.....	4	4
By inspector's warrant	4	2	6	.....	44	44
By Lieutenant-Governor's warrant	.....	.....	.....	.....	.....	.....
By voluntary application	6	4	10	.....	.....	.....
Totals	113	101	214	.....	48	48
Discharged during the year	69	52	121	.....	6	6
Died during the year	41	34	75	.....	16	16
Transferred to other hospitals	.....	.....	.....	.....	5	5
Eloped during the year	.....	.....	.....	.....	.....	.....
Total	110	86	196	.....	27	27
Classification of discharges:						
As recovered	18	13	31	.....	1	1
As improved	48	36	84	.....	4	4
As unimproved	3	1	4	.....	1	1
As without psychosis	.....	2	2	.....	.....	.....
	69	52	121	.....	6	6
Patients in hospital end of year	429	410	839	.....	412	412
Patients on probation or absent end of year	11	25	36	.....	3	3
Total number admitted since opening	2,891	2,825	5,716	.....	686	686
Total number discharged since opening	1,486	1,564	3,050	.....	112	112
Total number died since opening	965	826	1,791	.....	159	159
Balance on hospital books end of year as above	440	435	875	.....	415	415

No. 4

the admissions and discharges, and furnishes a study in regard to the number shown as recovered compared with the total population.

Hamilton			Kingston			London			Mimico		
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
605	659	1,264	324	234	558	679	724	1,403	305	311	616
41	21	62	11	7	18	6	9	15	24	16	40
646	680	1,326	335	241	576	685	733	1,418	329	327	656
108	105	213	44	38	82	129	117	246	61	38	99
32	30	62	31	25	56	51	43	94	6	7	13
1	2	3	60	56	116	1	3	4	.....	1	1
141	137	278	135	119	254	181	163	344	67	46	113
787	817	1,604	470	360	830	866	896	1,762	396	373	769
80	116	196	84	84	168	103	138	241	18	21	39
54	16	70	43	29	72	55	15	70	46	25	71
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7	5	12	8	6	14	23	10	33	3	.....	3
141	137	278	135	119	254	181	163	344	67	46	113
106	96	202	43	42	85	120	113	233	50	31	81
59	52	111	23	20	43	62	68	130	17	16	33
12	63	75	2	.....	2	1	.....	1	.....	.....	.....
.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....
177	211	408	70	62	132	183	181	364	67	47	114
1	14	15	29	20	49	56	56	112	15	17	32
81	76	157	13	20	33	56	51	107	30	14	44
16	4	20	1	2	3	2	5	7	5	.....	5
8	2	10	.....	.....	.....	6	1	7	.....	.....	.....
106	96	222	43	42	85	120	113	233	50	31	81
581	582	1,163	396	293	689	651	691	1,342	322	315	637
29	24	53	4	5	9	32	34	56	6	12	18
5,363	5,225	10,588	3,889	3,217	7,106	5,868	5,570	11,438	2,734	2,437	5,171
2,901	2,972	5,873	2,313	1,957	4,270	3,206	3,048	6,254	1,554	1,413	2,967
1,852	1,647	3,499	1,176	962	2,138	1,979	1,807	3,786	851	698	1,549
610	606	1,216	400	298	698	683	715	1,398	329	326	655

TABLE

Deals entirely with the movement of the population of the hospitals. It gives the classification of and improved in each hospital, as

	Orillia			Penetanguishene		
	Male	Female	Total	Male	Female	Total
Patients in hospital beginning of year	670	656	1,326	163	217	380
Patients on probation beginning of year	18	18	36	.....	.....	.....
Total beginning of year	688	674	1,362	163	217	380
First admissions during the year	75	58	133	1	1	2
Readmissions during the year	8	4	12	.....	.....	.....
Transfers during the year	.....	.....	.....	13	9	22
Total admissions during the year	83	62	145	14	10	24
Total on books during the year	771	736	1,507	177	227	404
Classifications of admissions:						
By physicians' certificates	77	51	128	3	6	9
By inspector's warrant	6	10	16	11	3	14
By Lieutenant-Governor's warrant	.....	1	1	.....	.....	.....
By voluntary application	.....	.....	.....	.....	1	1
Total	83	62	145	14	10	24
Discharged during the year	41	30	71	2	1	3
Died during the year	23	24	47	6	8	14
Transferred to other hospitals	1	3	4	.....	.....	.....
Eloped during the year	.....	.....	.....	.....	.....	.....
Total	65	57	122	8	9	17
Classification of discharges:						
As recovered	.....	.....	.....	.....	.....	.....
As improved	30	27	57	.....	1	1
As unimproved	11	3	14	2	.....	2
As without psychosis	.....	.....	.....	.....	.....	.....
	41	30	71	2	1	3
Patients in hospital end of year	688	663	1,351	169	218	387
Patients on probation or absent end of year	18	16	34	.....	1	1
Total number admitted since opening	2,426	1,961	4,387	415	522	937
Total number discharged since opening	534	256	790	71	65	136
Total number died since opening	1,186	1,026	2,212	175	239	414
Balance on hospital books end of year as above	706	679	1,385	169	218	387

No. 4—*Continued*

the admissions and discharges, and furnishes a study in regard to the number shown as recovered compared with the total population.

Toronto			Whitby			Woodstock		
Male	Female	Total	Male	Female	Total	Male	Female	Total
396	425	821	741	731	1,472	92	97	189
14	24	38	40	55	95	1	3	4
410	449	859	781	786	1,567	93	100	193
151	147	298	146	184	330	11	7	18
56	40	96	30	31	61	2	5	7
1	2	3	5	.....	5	.....	.....	.....
208	189	397	181	215	396	13	12	25
618	638	1,256	962	1,001	1,963	106	112	218
89	135	224	98	171	269	12	11	23
93	40	133	42	26	68	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
26	14	40	41	18	59	1	1	2
208	189	397	181	215	396	13	12	25
132	105	237	99	120	219	8	9	17
53	59	112	46	47	93	4	8	12
67	11	78	2	36	38	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....
252	175	427	147	203	350	12	17	29
34	50	84	50	52	102	.....	1	1
81	44	115	41	55	96	5	3	8
13	8	21	8	13	21	3	5	8
4	3	7	.....	.....	.....	.....	.....	.....
132	105	237	99	120	219	8	9	17
354	451	805	779	762	1,541	93	95	188
12	12	24	36	36	72	1	.....	1
9,519	9,124	18,643	1,717	1,674	3,394	499	395	894
6,572	6,601	13,173	589	614	1,203	226	158	384
2,581	2,060	4,641	313	262	575	179	142	321
366	463	829	815	798	1,613	94	95	189

TABLE No. 4—*Concluded*

Deals entirely with the movement of the population of the hospitals. It gives the classification of the admissions and discharges, and furnishes a study in regard to the number shown as recovered and improved in each hospital, as compared with the total population.

	Guelph			Grand Total		
	Male	Female	Total	Male	Female	Total
Patients in hospital beginning of year	111		111	4,491	4,837	9,328
Patients on probation beginning of year	8		8	195	184	379
Total beginning of year	119		119	4,686	5,021	9,707
First admissions during the year	8		8	821	781	1,602
Readmissions during the year				242	204	446
Transfers during the year	5		5	86	117	203
Total admissions during the year	13		13	1,149	1,102	2,251
Total on books during the year	132		132	5,835	6,123	11,958
Classifications of admissions:						
By physicians' certificates	2		2			
By inspector's warrant	5		5			
By Lieutenant-Governor's warrant	6		6			
By voluntary application						
Total	13		13	1,149	1,102	2,251
Discharged during the year	13		13	338	352	690
Died during the year	4		4			
Transferred to other hospitals	1		1			
Eloped during the year						
Total	18		18	1,109	1,075	2,184
Classification of discharges:						
As recovered						
As improved	10		10			
As unimproved	3		3			
As without psychosis						
	13		13	683	605	1,288
Patients in hospitals end of year	113		113			
Patients on probation or absent end of year	1		1			
Total number admitted since opening	181		181	35,502	33,636	69,138
Total number discharged since opening	44		44	19,496	18,760	38,256
Total number died since opening	23		23	11,280	9,828	21,108
Balance on hospital books end of year as above	114		114	4,726	5,048	9,774

TABLE

Provides an opportunity for the study of the parentage of patients admitted during the year. The table is divided between

Age Groups	Aggregate			Native-Born														
				Total			Parentage											
							Native			Foreign			Mixed			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 15 years	52	29	81	48	28	76	25	10	35	5	8	13	9	6	15	9	4	13
15–19 years	67	42	109	54	31	85	29	17	46	7	2	9	9	6	15	9	6	15
20–24 years	62	53	115	45	35	80	28	21	49	3	2	5	5	7	12	9	5	14
25–29 years	85	73	158	57	48	105	24	22	46	5	4	9	11	7	18	17	15	32
30–34 years	80	68	148	54	48	102	29	32	61	2	4	6	8	9	17	14	3	17
35–39 years	71	62	133	33	43	76	20	29	49	2	4	6	6	5	11	5	7	12
40–44 years	73	69	142	34	52	86	13	26	39	2	10	12	8	12	20	10	5	15
45–49 years	58	80	138	34	50	84	15	26	41	5	6	11	6	5	11	9	13	22
50–54 years	55	80	135	44	62	106	12	19	31	12	14	26	10	13	23	9	12	21
55–59 years	48	36	84	35	26	61	10	9	19	11	8	19	4	6	10	10	4	14
60–64 years	42	60	102	36	47	83	10	17	27	7	11	18	12	10	22	7	9	16
65–69 years	51	48	99	33	33	66	5	6	11	11	16	27	6	6	12	13	5	18
70 years and over	73	77	150	53	40	93	14	9	23	10	16	26	17	5	22	12	10	22
Unascertained	4	4	8	1	2	3	...	...	...	...	2	2	...	...	...	1	...	1
Total	821	781	1602	561	545	1106	234	243	477	82	107	189	111	97	208	134	98	232

No. 4A

To further this study they are shown under age groups, from fifteen years to seventy and over. Native and Foreign born.

Total			Foreign-Born															Nativity unascertained		
			Time in Canada before Admission																	
			Under 5 years			5–9 years			10–14 years			15 years and over			Unascertained					
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
4	1	5	1	1	2	1	...	1	1	...	1	....	....	....	1	...	1	....	....	....
13	11	24	4	1	5	2	2	4	1	2	3	3	2	5	3	2	5	....	2	2
17	18	35	6	5	11	3	2	5	3	...	3	3	7	10	2	4	6	....	....	....
28	25	53	3	5	8	10	2	12	2	2	4	5	8	13	7	8	15	1	...	1
26	20	46	7	5	12	7	4	11	....	1	1	8	4	12	4	5	9	....	1	1
38	19	57	6	2	8	1	2	3	7	1	8	18	7	25	6	7	13	....	....	....
39	17	56	5	1	6	4	2	6	3	2	5	16	9	25	8	2	11	2	1	3
24	30	54	2	...	2	1	1	2	2	1	3	13	16	29	6	12	18	....	....	....
11	18	29	....	....	....	....	3	3	....	1	1	8	10	18	3	4	7	....	....	....
13	10	23	....	1	1	....	1	1	....	1	1	10	2	12	3	4	7	....	1	1
6	13	19	1	...	1	....	1	1	....	....	....	4	6	10	1	5	6	....	1	1
18	15	33	5	2	7	....	2	2	2	...	2	8	5	13	3	6	9	....	....	....
20	37	57	....	....	....	....	....	....	....	2	2	9	25	34	11	8	19	....	2	2
3	2	5	1	...	1	....	....	....	....	....	....	....	....	....	1	1	2	1	1	2
260	236	496	41	23	64	29	22	51	21	13	34	105	101	206	60	68	128	4	9	13

TABLE No. 5

Permits of a very interesting study of the nativity of patients. This table should be of especial interest to all those interested in the immigration problem.

	First Admissions			Readmissions		
	Male	Female	Total	Male	Female	Total
Canada	558	543	1,101	171	143	314
Africa	.....	.....	.....	.....	.....	.....
Australia	.....	.....	.....	.....	.....	.....
Armenia	.....	.....	.....	.....	.....	.....
Bulgaria	.....	.....	.....	.....	.....	.....
Austria	5	2	7	.....	3	3
Belgium	.....	.....	.....	.....	1	1
Central America	.....	.....	.....	.....	.....	.....
China	3	.....	3	.....	.....	.....
Czecho-Slovakia	4	.....	4	3	.....	3
Denmark	.....	.....	.....	.....	.....	.....
England	85	108	193	38	31	69
Finland	15	8	23	.....	1	1
France	2	2	4	.....	.....	.....
Germany	1	3	4	.....	.....	.....
Greece	.....	.....	.....	.....	.....	.....
Holland	3	.....	3	.....	.....	.....
Hungary	2	.....	2	.....	.....	.....
India	.....	.....	.....	.....	.....	.....
Ireland	23	14	37	2	.....	2
Italy	7	8	15	1	3	4
Japan	.....	.....	.....	.....	.....	.....
Jugo-Slavia	3	1	4	.....	.....	.....
Norway	.....	.....	.....	.....	.....	.....
Newfoundland	1	6	7	1	1	2
Poland	11	8	19	3	3	6
Roumania	10	5	15	1	1	2
Russia	11	12	23	2	.....	2
Scotland	34	32	66	4	7	11
South America	.....	.....	.....	.....	.....	.....
Spain	.....	.....	.....	.....	.....	.....
Sweden	2	.....	2	1	.....	1
Switzerland	.....	.....	.....	.....	.....	.....
Turkey	.....	.....	.....	.....	.....	.....
United States	19	13	32	9	5	14
West Indies	1	1	2	.....	3	3
Other British Possessions	6	3	9	2	.....	2
Other Countries	9	3	12	2	.....	2
Unascertained	6	9	15	2	2	4
Total	821	781	1,602	242	204	446

TABLE No. 5A

Covers the citizenship of the first admissions.

Hospital	Citizens by Birth			Citizens by Naturalization			Aliens			Citizenship Unascertained			Citizens of British Birth Outside Canada			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Brockville	73	73	146	5	3	8	.....	.....	.....	1	.....	1	8	6	14	87	82	169
Cobourg	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	4	4
Hamilton	76	69	145	5	19	24	6	6	12	11	5	16	10	6	16	108	105	213
Kingston	35	35	70	1	.....	1	.....	.....	.....	1	1	2	7	2	9	44	38	82
London	98	91	189	6	1	7	5	1	6	1	2	3	19	22	41	129	117	246
Mimico	29	16	45	.....	.....	.....	22	12	34	.....	.....	.....	10	10	20	61	38	99
Orillia	66	49	115	.....	.....	.....	6	4	10	.....	.....	.....	3	5	8	75	58	133
Penetanguishene	1	1	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	1	2
Toronto	66	67	133	18	8	26	21	12	33	.....	.....	.....	46	60	106	151	147	298
Woodstock	8	6	14	.....	.....	.....	1	1	2	.....	.....	.....	2	.....	2	11	7	18
Whitby	100	133	233	35	37	72	8	11	19	3	3	6	.....	.....	.....	146	184	330
Guelph	6	.....	6	.....	.....	.....	1	.....	1	.....	.....	.....	1	.....	1	8	.....	8
	558	543	1101	70	68	138	70	47	117	17	11	28	106	112	218	821	781	1602

TABLE No. 6

Covers the Psychoses of first admissions. It will be noted that these Psychoses are arranged in twenty-two classifications, which are standardized throughout the following tables.

	Males	Females	Total	Males	Females	Total
1. Traumatic psychoses	...	....	...	3	1	4
2. Senile psychoses	...	....	...	89	118	207
3. Psychoses with cerebral arteriosclerosis	...	....	...	49	30	79
4. General paresis	...	....	...	70	16	86
5. Psychoses with cerebral syphilis	...	....	...	4	2	6
6. Psychoses with Huntingdon's chorea	...	....	...	2	5	7
7. Psychoses with brain tumour	...	....	...	1	2	3
8. Psychoses with other brain or nervous diseases, total	...	....	...	5	3	8
(a) Cerebral embolism	2	1	3	...	....	...
(b) Paralysis agitans	...	1	1	...	....	...
(c) Meningitis, tubercular or other forms	...	....	...	...	....	...
(d) Multiple sclerosis	...	....	...	...	....	...
(e) Tabes dorsalis	...	....	...	...	....	...
(f) Acute chorea	...	....	...	...	....	...
(g) Other diseases	3	1	4	...	....	...
9. Alcoholic psychoses, total	...	....	...	19	8	27
(a) Delirium tremens	4	....	4	...	....	...
(b) Korsakow's psychosis	...	2	2	...	....	...
(c) Acute hallucinosis	3	5	8	...	....	...
(d) Other types, acute or chronic	12	1	13	...	....	...
10. Psychoses due to drugs and other exogenous toxins, total	..	..	..	5	1	6
(a) Opium (and derivatives), cocaine bromides, chloral, etc., alone or combined	3	..	3	..	..	..
(b) Metals, as lead, arsenic	1	..	1	..	..	..
(c) Gases	..	..	..	..	..	..
(d) Other exogenous toxins	1	1	2	..	..	..
11. Psychoses with pellagra	..	..	..	..	..	..
12. Psychoses with other somatic diseases, total	..	..	..	15	31	46
(a) Delirium with infectious diseases	1	1	2	..	..	..
(b) Post-infectious psychosis	2	5	7	..	..	..
(c) Exhaustion delirium	7	6	13	..	..	..
(d) Delirium of unknown origin	..	..	..	....	..	..
(e) Cardio-renal diseases	1	1	2	..	..	..
(f) Diseases of the ductless glands	1	2	3	..	..	..
(g) Other diseases or conditions	3	16	19	..	..	..
13. Manic-depressive psychoses, total	..	..	..	101	111	212
(a) Manic type	33	45	78	..	..	..
(b) Depressive type	65	65	120	..	..	..
(c) Other types	3	11	14	..	..	..
14. Involution melancholia	..	..	..	13	49	62
15. Dementia praecox (schizophrenia)	..	..	..	193	238	431
16. Paranoia and paranoid conditions	..	..	..	20	13	33
17. Epileptic psychoses	..	..	..	25	14	39
18. Psychoneuroses and neuroses, total	..	..	..	14	13	27
(a) Hysterical type	1	6	7	..	..	..
(b) Psychasthenic type (anxiety and obsessive forms	3	..	3	..	..	..
(c) Neurasthenic type	10	6	16	..	..	..
(d) Other types	..	1	1	..	..	..
19. Psychoses with psychopathic personality	..	..	..	1	1	2
20. Psychoses with mental deficiency	..	..	..	41	33	74
21. Undiagnosed psychoses	..	..	..	6	12	18
22. Without psychosis, total	..	..	..	145	80	225
(a) Epilepsy without psychosis	22	19	41	..	..	..
(b) Alcoholism without psychosis	25	1	26	..	..	..
(c) Drug addiction without psychosis	9	5	14	..	..	..
(d) Psychopathic personality without psychosis	2	..	2	..	..	..
(e) Mental deficiency	77	44	121	..	..	..
(f) Others	10	11	..	..	..	..
Total				821	781	1,602

TABLE

Furnishes the distribution of the patients in regard to race under the different psychoses. This

Race	Total			Traumatic			Senile			With cerebral arterio-sclerosis			General paralysis		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African	5	....	5	....	....	....	....	....	....	....	....	....	1	....	1
American Indian	3	4	7	....	....	....	....	1	1	....	....	....	....	....	....
Armenian	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Bulgarian	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Chinese	4	....	4	....	....	....	....	....	....	....	....	....	3	....	3
Dutch and Flemish	8	3	11	....	....	....	2	2	4	2	....	2	1	....	1
East Indian	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
English	303	292	595	1	....	1	39	46	85	15	8	23	26	4	30
Finnish	14	9	23	....	....	....	....	1	1	....	....	....	2	....	2
French	27	32	59	....	....	....	1	....	1	1	2	3	3	2	5
German	24	20	44	....	....	....	....	3	3	4	1	5	1	....	1
Greek	1	....	1	....	....	....	....	....	....	....	....	....	1	....	1
Hebrew	4	2	6	....	....	....	....	....	....	....	....	....	1	....	1
Irish	104	86	190	1	....	1	20	28	48	9	5	14	5	1	6
Italian	6	9	15	....	....	....	....	1	1	2	....	2	....	2	2
Japanese	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Roumanian	2	3	5	....	....	....	....	1	1	....	....	....	....	....	....
Russian	17	16	33	....	....	....	....	1	1	....	....	....	1	2	3
Scandinavian	8	....	8	....	....	....	....	....	....	....	....	....	....	....	....
Scotch	67	108	175	1	1	2	11	21	32	3	4	7	5	2	7
Slavonic	16	14	30	....	....	....	....	1	1	1	....	1	2	....	2
Spanish	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Syrian	1	1	2	....	....	....	....	....	....	....	....	....	....	....	....
Turkish	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Other Specific Races	60	40	100	....	....	....	....	....	....	1	....	1	3	....	3
Mixed Races	71	73	144	....	....	....	7	3	10	4	5	9	11	1	12
Races Unascertained	75	69	144	....	....	....	9	9	18	7	5	12	4	2	6
Totals	821	781	1602	3	1	4	89	118	207	49	30	79	70	16	86

No. 7

differs in certain respects from Table No. 5, where the admissions were show nunder countries.

With cerebral syphilis			With Hunting-ton's chorea			With brain tumor			With other brain or nervous diseases			Alcoholic			Due to drugs and other exogenous toxins			With pellagra		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
2	1	3	2	2	4				4		4	9	4	13	2		2			
												1		1						
									1	1	2									
1		1																		
	1	1		1	1							4	2	6						
				2	2					1	1	2		2		1	1			
							1	1												
										1	1				1		1			
1		1										2	1	3	1		1			
						1	1	2				1	1	2	1		1			
4	2	6	2	5	7	1	2	3	5	3	8	19	8	27	5	1	6			

TABLE

Furnishes the distribution of the patients in regard to race under the different psychoses. This

Race	With other somatic diseases			Manic-depressive			Involution melancholia			Dementia praecox			Paranoia and paranoid conditions		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
African				1		1				2		2			
American Indian		1	1								1	1			
Armenian															
Bulgarian															
Chinese													1		1
Dutch and Flemish								1	1	2		2			
East Indian															
English	5	14	19	33	49	82	3	17	20	69	92	161	10	8	18
Finnish				2	2	4				7	6	13	1		1
French		2	2	6	8	14				9	11	20	1		1
German				5	3	8	4	5	9	5	5	10			
Greek															
Hebrew					1	1				2		2			
Irish	3	2	5	13	8	21	2	6	8	21	21	42	1	2	3
Italian					1	1				2	3	5	1	1	2
Japanese															
Roumanian		1	1							1	1	2	1		1
Russian				5	1	6				11	9	20			
Scandinavian				5		5				3		3			
Scotch	1	5	6	10	13	23	1	7	8	21	36	57	2	1	3
Slavonic					3	3				12	5	17			
Spanish															
Syrian											1	1	1		1
Turkish				1		1									
Other Specific Races				4		4	1	1	2	4	9	13	1		1
Mixed Races	1	1	2	8	13	21	1	7	8	14	27	41			
Races Unascertained	5	5	10	8	11	19	1	5	6	8	11	19		1	1
Totals	15	31	46	101	111	212	13	49	62	193	238	431	20	13	33

No. 7—*Continued*

differs in certain respects from Tabe No. 5, where the admissions were shown under countries.

Epileptic psychoses			Psycho-neuroses and neuroses			With psycho-pathic personality			With mental deficiency			Undiagnosed psychoses			Without psychoses		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
															1		1
	1	1													3		3
1		1															
9	3	12	9	3	12	1	1	2	19	13	32	2	6	8	43	21	64
															1		1
2		2							3	4	7		1	1		1	1
									2	1	3	1	1	2	1	1	2
															1	1	2
2	5	7	1	1	2				5	1	6	2		2	15	2	17
1		1														1	1
										1	1					2	2
1	2	3	1	2	3				4	4	8		2	2	4	4	8
										1	1				1	3	4
1		1							1	3	4		2	2	43	24	67
4	1	5	2	3	5				1	3	4				14	8	22
4	2	6		4	4				6	2	8	1		1	19	10	29
25	14	39	14	13	27	1	1	2	41	33	74	6	12	18	146	78	224

TABLE

Furnishes an interesting study in regard to the

Psychoses	Total			Under 15 Years			15–19 Years			20–24 Years			25–29 Years			30–34 Years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	1	4				1		1							1		1
2. Senile	89	118	207															
3. With cerebral arterio-sclerosis	49	30	79															
4. General paralysis	70	16	86								2	2	3		3	14	1	15
5. With cerebral syphilis	4	2	6							1		1		1	1			
6. With Huntington's chorea	2	5	7															
7. With brain tumour	1	2	3															
8. With other brain or nervous diseases	5	3	8							1		1				1		1
9. Alcoholic	19	8	27							2		2	1		1	2		2
10. Due to drugs and other exogenous toxins	5	1	6											1	1			
11. With pellagra																		
12. With other somatic diseases	15	31	46	1		1					2	2		5	5	1	5	6
13. Manic-depressive	101	111	212				6	2	8	8	5	13	9	13	22	14	9	23
14. Involution melancholia	13	49	62										1		1	2		2
15. Dementia praecox	193	238	431				18	12	30	29	26	55	47	37	84	29	43	72
16. Paranoia or paranoid conditions	20	13	33							1		1	4		4	2	1	3
17. Epileptic psychoses	25	14	39	1	1	2	5	1	6	3	2	5	4		4	1	3	4
18. Psychoneuroses and neuroses	14	13	27					2	2		1	1	1	3	4	1	1	2
19. With psychopathic personality	1	1	2											1	1			
20. With mental deficiency	41	33	74	2	2	4	8	3	11	6	4	10	6	4	10	2	2	4
21. Undiagnosed psychoses	6	12	18				1		1		2	2	1	3	4		1	1
22. Without psychoses	145	80	225	48	26	74	23	21	44	12	3	15	8	12	20	12	4	16
Total	821	781	1602	52	29	81	62	41	103	63	47	110	85	80	165	81	71	152

No. 8

age of the patients under the different psychoses.

35–39 Years			40–44 Years			45–49 Years			50–54 Years			55–59 Years			60–64 Years			65–69 Years			70 Years and over			Unascertained		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
...	..	...	...	..	...	...	..	...	...	..	...	1	..	1	...	..	...	...	..	...	1	..	1	...	..	...
...	..	...	...	..	...	...	2	2	1	2	3	4	2	6	7	17	24	21	25	46	56	70	126	...	..	...
...	1	1	...	..	...	3	1	4	6	8	14	10	4	14	8	8	16	14	3	17	6	2	8	2	3	5
10	1	11	13	2	15	13	2	15	9	5	14	5	1	6	2	1	3	1	2	2	...	..	...	...	..	...
...	..	...	...	..	...	2	..	2	1	1	2	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...
...	1	1	1	2	3	...	..	...	...	1	1	...	..	...	1	1	2	...	..	...	...	..	...	...	..	...
...	..	...	...	..	...	1	..	1	...	1	1	...	1	1	...	..	...	...	..	...	...	..	...	...	..	...
...	..	...	...	..	...	...	1	1	...	1	1	1	1	2	...	..	...	1	..	1	1	..	1	...	..	...
3	1	4	3	2	5	1	3	4	2	..	2	1	1	2	2	1	3	2	..	2	...	..	...	...	..	...
1	..	1	2	..	2	...	..	...	1	..	1	1	..	1	...	..	...	...	..	...	...	..	...	...	..	...
...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...
2	3	5	3	3	6	...	5	5	2	5	7	...	2	2	5	1	6	1	..	1	...	..	...	...	..	...
13	12	25	7	16	23	11	20	31	9	13	22	7	8	15	8	6	14	4	5	9	5	2	7	...	..	...
1	5	6	1	7	8	1	13	14	2	13	15	4	2	6	...	6	6	1	2	3	...	1	1	...	..	...
28	28	56	21	23	44	8	19	27	5	20	25	2	11	13	2	11	13	...	5	5	1	3	4	3	..	3
7	1	8	..	2	2	2	4	6	1	..	1	3	1	4	...	2	2	...	2	2	...	..	...	...	..	...
1	..	1	4	3	7	2	1	3	2	..	2	1	..	1	...	..	...	...	3	3	1	..	1	...	..	...
1	1	2	5	..	5	1	..	1	1	1	2	...	1	1	2	2	4	2	..	2	...	..	...	...	1	1
1	..	1	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...
3	5	8	3	4	7	4	4	8	1	2	3	2	1	3	3	2	5	1	..	1	...	..	...	...	..	...
1	1	2	...	1	1	...	2	2	1	1	2	...	..	...	1	..	1	...	1	1	1	..	1	...	..	...
6	4	10	10	1	11	8	6	14	8	2	10	5	..	5	2	1	3	1	..	1	1	..	1	1	..	1
78	64	142	73	66	139	57	83	140	52	76	128	47	36	83	43	59	102	49	47	96	73	78	151	6	4	10

TABLE No. 9

To those interested in educational work, this table furnishes a study in regard to the degree of education of the first admissions.

Psychoses	Total			Illiterate			Reads and Writes			Common School			High School			University			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	1	4	....	....	....	2	....	2	....	1	1	1	....	1	....	....	....	....	....	....
2. Senile	90	120	210	4	1	5	41	35	76	33	59	92	2	10	12	....	1	1	10	14	24
3. With cerebral arteriosclerosis	47	28	75	1	....	1	12	9	21	24	11	35	1	5	6	1	2	3	8	1	9
4. General paralysis	70	16	86	3	3	6	15	6	21	30	6	36	5	....	5	5	....	5	12	1	13
5. With cerebral syphilis	4	2	6	....	....	....	....	2	2	2	....	2	1	....	1	....	....	....	1	....	1
6. With Huntington's chorea	2	6	8	....	....	....	1	2	3	....	3	3	....	1	1	....	....	....	1	....	1
7. With brain tumor	1	2	3	....	....	....	....	1	1	1	1	2	....	....	....	....	....	....	....	....	....
8. With other brain or nervous diseases	6	3	9	1	....	1	....	....	....	4	2	6	1	....	1	....	....	....	....	1	1
9. Alcoholic	19	8	27	....	....	....	4	1	5	9	7	16	2	....	2	....	....	....	4	....	4
10. Due to drugs and other exogenous toxins	5	2	7	....	....	....	1	1	2	2	....	2	....	1	1	2	....	2	....	....	....
11. With pellagra	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
12. With other somatic diseases	15	31	46	1	....	1	2	6	8	11	20	31	1	4	5	....	....	....	....	1	1
13. Manic-depressive	101	111	212	4	....	4	24	21	45	58	58	116	8	29	37	3	....	3	4	3	7
14. Involution melancholia	13	56	69	....	2	2	4	13	17	9	29	38	....	8	8	....	....	....	....	4	4
15. Dementia praecox	194	238	432	6	6	12	59	44	103	82	133	215	24	49	73	3	1	4	20	5	25
16. Paranoia or paranoid conditions	20	13	33	....	1	1	2	2	4	12	9	21	2	1	3	2	....	2	2	....	2
17. Epileptic psychoses	24	14	38	5	3	8	7	3	10	8	7	15	2	1	3	....	....	....	2	....	2
18. Psychoneuroses and neuroses	14	13	27	1	1	2	1	....	1	11	5	16	....	5	5	1	1	2	....	1	1
19. With psychopathic personality	1	1	2	....	....	....	....	....	....	....	....	....	1	....	1	....	1	1	....	....	....
20. With mental deficiency	41	33	74	8	13	21	20	8	28	11	11	22	1	1	2	....	....	....	1	....	1
21. Undiagnosed psychoses	6	12	18	2	....	2	2	3	5	2	4	6	....	5	5	....	....	....	....	....	....
22. Without psychoses	145	71	216	60	33	93	34	22	56	22	10	32	15	4	19	8	....	8	6	2	8
Total	821	781	1602	96	63	159	231	179	410	331	376	707	67	124	191	25	6	31	71	33	104

TABLE No. 10

Shows the environment of first admissions, and should be studied in conjunction with the population figures for the Province, as divided between Urban and Rural.

Psychoses	Total			Urban, 2,500 and over			Rural			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	1	4	1	....	1	2	1	3	....	....	....
2. Senile	89	120	209	59	71	130	30	49	79	....	....	....
3. With cerebral arteriosclerosis	47	28	75	27	21	48	20	7	27	....	....	....
4. General paralysis	70	16	86	59	11	70	11	5	16	....	....	....
5. With cerebral syphilis	4	2	6	4	2	6	....	....	....	....	....	....
6. With Huntington's chorea	2	6	8	2	3	5	....	3	3	....	....	....
7. With brain tumour	1	2	3	....	2	2	1	....	1	....	....	....
8. With other brain or nervous diseases	6	3	9	4	2	6	2	1	3	....	....	....
9. Alcoholic	19	8	27	16	6	22	3	2	5	....	....	....
10. Due to drugs and other exogenous toxins	5	2	7	4	2	6	1	....	1	....	....	....
11. With pellagra	....	....	....	....	....	....	....	....	....	....	....	....
12. With other somatic diseases	15	31	46	8	25	33	7	6	13	....	....	....
13. Manic-depressive	101	111	212	56	75	131	45	36	81	....	....	....
14. Involution melancholia	13	56	69	8	40	48	5	16	21	....	....	....
15. Dementia praecox	193	238	431	120	181	301	73	57	130	....	....	....
16. Paranoia or paranoid conditions	20	13	33	14	9	23	6	4	10	....	....	....
17. Epileptic psychoses	25	14	39	16	10	26	9	4	13	....	....	....
18. Psychoneuroses and neuroses	14	13	27	12	9	21	2	4	6	....	....	....
19. With psychopathic personality	1	1	2	1	1	2	....	....	....	....	....	....
20. With mental deficiency	41	33	74	19	21	40	22	12	34	....	....	....
21. Undiagnosed psychoses	6	12	18	2	7	9	4	5	9	....	....	....
22. Without psychoses	146	71	217	112	62	174	34	9	43	....	....	....
Total	821	781	1602	544	560	1104	277	221	498	....	....	....

TABLE No. 11

Shows the economical conditions of first admissions with principal psychoses.

Psychoses	Total			Dependent			Living on Daily Earnings			Comfortable. Ample for 4 Months			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	1	4	...	...	...	3	...	3	...	1	1	...	...	...
2. Senile	89	120	209	20	21	41	38	50	88	30	49	79	.	...	1
3. With cerebral arteriosclerosis	47	28	75	8	2	10	22	9	31	16	17	33	1	...	...
4. General paralysis	70	16	86	10	...	10	46	12	58	14	4	18	...	...	...
5. With cerebral syphilis	4	2	6	2	1	3	2	1	3	...	...	..	...	...	...
6. With Huntington's chorea	2	6	8	1	1	2	1	3	4	...	2	2	...	...	...
7. With brain tumour	1	2	3	...	1	1	...	...	...	1	1	2	...	...	...
8. With other brain or nervous diseases	6	3	9	1	...	1	2	1	3	3	2	5	...	...	...
9. Alcoholic	19	8	27	5	...	5	8	2	10	6	6	12	...	...	...
10. Due to drugs and other exogenous toxins	5	2	7	1	...	1	1	2	3	3	...	3	...	...	...
11. Pellagra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. With other somatic diseases	15	31	46	3	4	7	8	17	25	4	10	14	...	...	...
13. Manic-depressive	101	111	212	14	13	27	57	48	105	27	48	75	3	2	5
14. Involution melancholia	13	56	69	1	2	3	5	24	29	7	29	36	...	1	1
15. Dementia praecox	193	228	421	49	34	83	112	76	188	28	115	143	4	3	7
16. Paranoia or paranoid conditions	20	13	33	4	5	9	10	4	14	3	4	7	3	...	3
17. Epileptic psychoses	25	14	39	6	2	8	12	9	21	7	3	10	...	...	...
18. Psychoneuroses and neuroses	14	13	27	2	2	4	9	2	11	3	9	12	...	...	...
19. With psychopathic personality	1	1	2	...	...	...	...	...	...	1	1	2	...	...	...
20. With mental deficiency	41	33	74	13	17	30	18	10	28	10	6	16	...	...	...
21. Undiagnosed psychoses	13	25	38	6	10	16	4	10	14	3	5	8	...	...	...
22. Without psychoses	139	68	207	86	56	142	18	8	26	34	4	38	1	...	1
Total	821	781	1602	232	171	403	376	288	664	200	316	516	13	6	19

TABLE No. 12

As the use of Alcohol as a beverage has always been a controversial subject, the classification of the first admissions under the headings in this table forms an interesting study.

Psychoses	Total			Abstinent			Temperate			Intemperate			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	3	1	4	2	1	3	1	...	1	...	...	...	...	...	...
2. Senile	88	120	208	41	110	151	33	9	42	13	1	14	1	...	1
3. With cerebral arteriosclerosis	47	28	75	26	27	53	14	1	5	6	...	6	1	...	1
4. General paralysis	70	16	86	18	14	32	29	...	29	13	1	14	10	1	11
5. With cerebral syphilis	4	2	6	1	1	2	3	...	3	...	1	1	...	...	...
6. With Huntington's chorea	2	6	8	2	5	7	...	1	1	...	...	...	...	...	...
7. With brain tumour	1	2	3	1	2	3	...	...	...	...	...	...	...	...	...
8. With other brain or nervous diseases	6	3	9	3	2	5	2	1	3	1	...	1	...	...	...
9. Alcoholic	18	8	27	...	...	...	...	...	...	19	8	27	...	...	...
10. Due to drugs and other exogenous toxins	5	2	7	...	2	2	3	...	3	2	...	2	...	...	...
11. With pellagra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12. With other somatic diseases	16	30	46	4	29	33	8	1	9	3	...	3	1	...	1
13. Manic-depressive	101	111	212	38	96	134	49	12	61	10	1	11	4	2	6
14. Involution melancholia	13	56	69	8	53	61	5	2	7	...	...	...	...	1	1
15. Dementia praecox	192	237	429	91	212	303	72	21	93	15	1	16	14	3	17
16. Paranoia or paranoid conditions	20	13	33	4	7	11	15	4	19	...	...	...	1	2	3
17. Epileptic psychoses	25	14	39	21	14	35	3	...	3	1	...	1	...	...	...
18. Psychoneuroses and neuroses	14	12	26	5	12	17	8	...	8	1	...	1	...	...	...
19. With psychopathic personality	1	1	2	...	...	...	...	1	1	1	...	1	...	...	...
20. With mental deficiency	41	30	71	27	23	50	6	2	8	4	2	6	4	3	7
21. Undiagnosed psychoses	5	13	18	1	7	8	3	4	7	...	...	...	1	2	3
22. Without psychoses	148	76	224	84	54	138	29	18	47	33	3	36	2	1	3
Total	821	781	1602	377	671	1048	283	77	360	122	18	140	39	15	54

TABLE No. 13

Classifies the first admission patients under marital conditions.

Psychoses	Total			Single			Married			Widowed			Separated			Divorced			Unascertained		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	11	20	31	3	5	8	6	4	10	2	11	13	....	....	....	....	....	....	....	....	....
2. Senile	98	113	211	11	31	42	55	35	90	32	46	78	....	1	1	....	....	....	....	....	....
3. With cerebral arteriosclerosis	45	18	63	5	3	8	27	8	35	12	7	19	1	....	1	....	....	....	....	....	....
4. General paralysis	54	14	68	11	2	13	37	8	45	4	4	8	1	....	1	1	....	1	....	....	....
5. With cerebral syphilis	4	2	6	2	1	3	2	....	2	....	1	1	....	....	....	....	....	....	....	....	....
6. With Huntington's chorea	2	6	8	2	2	4	....	3	3	....	1	1	....	....	....	....	....	....	....	....	....
7. With brain tumour	1	2	3	....	....	....	1	2	3	....	....	....	....	....	....	....	....	....	....	....	....
8. With other brain or nervous diseases	6	3	9	3	....	3	3	2	5	....	1	1	....	....	....	....	....	....	....	....	....
9. Alcoholic	19	8	27	7	....	7	8	8	16	2	....	2	....	....	....	....	....	....	2	....	2
10. Due to drugs and other exogenous toxins	5	2	7	....	1	1	4	1	5	1	....	1	....	....	....	....	....	....	....	....	....
11. With pellagra	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
12. With other somatic diseases	15	31	46	4	5	9	10	24	34	1	1	2	....	1	1	....	....	....	....	....	....
13. Manic-depressive	101	111	212	48	37	85	40	63	103	12	10	22	....	1	1	1	....	1	....	....	....
14. Involution melancholia	13	56	69	2	15	17	9	31	40	1	8	9	1	2	3	....	....	....	....	....	....
15. Dementia praecox	191	239	430	138	117	255	48	103	151	1	16	17	2	1	3	....	1	1	2	1	3
16. Paranoia or paranoid conditions	20	13	33	11	1	12	9	7	16	....	5	5	....	....	....	....	....	....	....	....	....
17. Epileptic psychoses	25	14	39	18	9	27	7	3	10	....	1	1	....	1	1	....	....	....	....	....	....
18. Psychoneuroses and neuroses	14	13	27	2	4	6	10	7	17	2	1	3	....	1	1	....	....	....	....	....	....
19. With psychopathic personality	1	1	2	....	1	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
20. With mental deficiency	40	34	74	35	23	58	5	9	14	....	....	....	....	2	2	....	....	....	....	....	....
21. Undiagnosed psychoses	6	12	18	3	5	8	3	7	10	....	....	....	....	....	....	....	....	....	....	....	....
22. Without psychoses	150	69	219	110	60	170	29	8	37	5	1	6	5	....	5	....	....	....	1	....	1
Total	821	781	1602	415	322	737	314	333	647	75	114	189	10	10	20	2	1	3	5	1	6

TABLE No. 14

Is the first and only table dealing with the psychoses of re-admissions. A study of this as compared with the discharges of previous years will prove interesting.

Psychoses	Males	Females	Total
1. Traumatic psychoses	1	.....	1
2. Senile pyschoses	11	6	17
3. Psychoses with cerebral arteriosclerosis	9	5	14
4. General paralysis	10	.....	10
5. Psychoses with cerebral syphilis	1	1	2
6. Psychoses with Huntington's chorea	.....	1	1
7. Psychoses with brain tumour	.....	.....	.....
8. Psychoses with other brain or nervous diseases	.....	2	2
9. Alcoholic psychoses	7	.....	7
10. Psychoses due to drugs and other exogenous toxins	1	2	3
11. Psychoses with pellagra	.....	1	1
12. Psychoses with somatic diseases	4	1	5
13. Manic-depressive psychoses	45	75	120
14. Involution melancholia	10	5	15
15. Dementia praecox	82	74	156
16. Paranoia and paranoid conditions	4	1	5
17. Epileptic psychoses	7	9	16
18. Psychoneuroses and neuroses	8	3	11
19. Psychoses with psychopathic personality	2	2	4
20. Psychoses with mental deficiency	12	4	16
21. Undiagnosed psychoses	1	.....	1
22. Without psychoses	27	12	39
Total	242	204	446

TABLE No. 15

Deals with the discharges of patients under the different psychoses, together with the condition of the patient at the time of discharge. From this table the reader is enabled to compare the recoveries and improvements with the total admissions for the year.

Psychoses	Total			Recovered			Improved			Unimproved		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	2	1	3	1	....	1	....	1	1	1	....	1
2. Senile	37	32	69	2	3	5	28	22	50	7	7	14
3. With cerebral arteriosclerosis	17	19	36	3	2	5	13	16	29	1	1	2
4. General paralysis	29	8	37	1	....	1	26	8	34	2	....	2
5. With cerebral syphilis	4	....	4	3	....	3	1	....	1	....	....	....
6. With Huntington's chorea	....	....	....	....	....	....	....	....	....	....	....	....
7. With brain tumour	....	....	....	....	....	....	....	....	....	....	....	....
8. With other brain or nervous diseases	3	2	5	....	....	....	2	2	4	1	....	1
9. Alcoholic	25	5	30	18	4	22	5	1	6	2	....	2
10. Due to drugs and other exogenous toxins	3	8	11	2	6	8	1	2	3	....	....	....
11. With pellagra	....	1	1	....	....	....	....	....	....	....	1	1
12. With other somatic diseases	10	15	25	8	13	21	2	1	3	....	1	1
13. Manic-depressive	118	146	264	65	97	162	50	48	98	3	1	4
14. Involution melancholia	16	36	52	7	15	22	9	20	29	....	1	1
15. Dementia praecox	221	215	436	47	63	110	165	140	305	9	12	21
16. Paranoia and other paranoid conditions	18	6	24	6	3	9	8	3	11	4	....	4
17. Epileptic psychoses	18	12	30	2	1	3	14	6	20	2	5	7
18. Psychoneuroses and neuroses	13	15	28	10	7	17	3	8	11	....	....	....
19. With psychopathic personality	5	2	7	1	....	1	2	1	3	2	1	3
20. With mental deficiency	37	25	62	8	5	13	27	18	45	2	2	4
21. Undiagnosed psychoses	....	3	3	....	2	2	....	1	1	....	....	....
22. Without psychoses	107	54	161	31	10	41	57	38	95	19	6	25
Total	683	605	1288	215	231	446	413	336	749	55	38	93

TABLE

Deals with the deaths in the Institutions during the period covered, and furnishes the psychoses

Causes of Death	Total			Senile			With Cerebral Arterio-sclerosis			General Paralysis			Alcoholic		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
I. Epidemic, Endemic and Infectious Diseases:															
Typhoid and paratyphoid fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...
Lethargic encephalitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of the respiratory system	24	31	55	1	1	2	...	...	...	...	...	...	...	...	...
Tuberculosis of other organs	2	3	5	...	...	...	...	1	1	...	...	...	...	...	...
Syphilis (non-nervous forms)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Purulent infection, septicaemia	2	2	4	...	...	...	1	...	1	...	...	...	...	...	...
Other infectious diseases	1	5	6	...	...	...	...	...	...	1	...	1	...	...	...
II. General Diseases not Included in Class I:															
Cancer and other malignant tumours	7	13	20	...	4	4	...	...	...	...	...	...	...	...	...
Tumour (non-cancerous)	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pellagra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alcoholism (acute or chronic)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other general diseases	15	10	25	8	2	10	...	...	...	...	...	...	...	...	...
III. Diseases of the Nervous System:															
Meningitis (non-epidemic)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tabes dorsalis (locomotor ataxia)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of spinal cord	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...
Cerebral hemorrhage, apoplexy	6	18	24	3	6	9	...	3	3	...	...	...	...	...	...
General paralysis of the insane	33	9	42	...	...	...	...	...	...	32	9	41	...	...	...
Other forms of mental disease	38	32	70	16	13	29	1	2	3	...	...	...	1	...	1
Epilepsy	23	17	40	...	...	...	...	...	...	...	...	...	...	...	...
Chorea	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of the nervous system	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...
IV. Diseases of the Circulatory System:															
Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Endocarditis and myocarditis	46	41	87	19	16	35	...	4	4	...	1	1	...	...	...
Angina pectoris	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...
Other diseases of the heart	2	3	5	1	...	1	...	1	1	...	...	...	...	...	...
Arteriosclerosis	15	26	41	5	6	11	10	12	22	...	...	...	...	...	...
Other diseases of the arteries	3	1	4	2	1	3	...	...	...	...	...	...	...	...	...
Other diseases of the circulatory system	14	10	24	10	7	17	1	...	1	...	...	...	...	...	...
V. Diseases of the Respiratory System:															
Bronchitis	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Bronchopneumonia	31	55	86	12	16	28	2	3	5	2	2	4	1	1	2
Lobar pneumonia	15	10	25	1	1	2	1	...	1	...	...	...	1	...	1
Pleurisy	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Asthma	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other diseases of the respiratory system (tuberculosis excepted)	20	34	54	7	10	17	1	...	1	1	...	1	...	...	...

No. 16

complete information in regard to the cause of death and is further divided under classification.

Manic Depressive			Involution Melancholia			Dementia Praecox			Paranoia and Paranoid Conditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Psychopathic Personality			With Mental Deficiency			All Other Psychoses		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
						2		2				1		1							1		1			
							2	2																		
5	1	6		1	1	12	20	32					2	2							6	5	11		1	1
						1		1													1	1	2		1	1
						1		1														1	1		1	1
							4	4																	1	1
			1		1	4	7	11													1	1	2	1	1	2
																								1	1	2
1	4	5				4	3	7	1		1													1	1	2
1		1		2	2	1	3	4	1	1	2											1	1		2	2
									1		1															
5	2	7	1	4	5	10	5	15													4	6	10			
												21	14	35							2	3	5			
																									2	2
							1	1													1		1			
4	5	9	3		3	11	10	21				2	1	3							2	2	4	5	2	7
							1	1													1	1	2			
	2	2								5	5													1		1
																					1		1			
1		1				2	2	4														1	1			
										1	1											1	1			
3	6	9		3	3	3	11	14		1	1	1	2	3	2	1	3				5	6	11		3	3
				1	1	5	3	8													4	2	6	3	3	6
																									1	1
1	3	4		2	2	7	6	13	2	3	5	1	6	7								1	1		3	3

TABLE

Deals with the deaths in the Institutions during the period covered, and furnishes the psychoses

Causes of Death	Total			Senile			With Cerebral Arterio-sclerosis			General Paralysis			Alcoholic		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
VI. Diseases of the Digestive System:															
Diseases of the pharynx and tonsils	4	3	7												
Ulcer of stomach and duodenum	2		2												
Other diseases of stomach (cancer excepted)															
Diarrhea and enteritis	4	1	5	1		1									
Appendicitis and typhilitis															
Hernia and intestinal obstruction	2	3	5	1	1	2									
Other diseases of intestines															
Cirrhosis of liver															
Biliary calculi															
Other diseases of liver															
Other diseases of digestive system (cancer and tuberculosis excepted)	1	2	3												
VII. Non-Venereal Diseases of Genito-Urinary System and Annexa:															
Nephritis	4	3	7	1	1	2	1		1						
Other diseases of kidneys and annexa	2		2	1		1									
Diseases of bladder															
Diseases of prostate															
Benign tumors of uterus															
Other diseases of genital organs															
Other diseases of genito-urinary system	1		1												
VIII. Diseases of the Skin and of the Cellular Tissue:															
Gangrene	5	3	8	2	2	4								1	1
Other diseases of skin and annexa	1		1												
IX. Diseases of the Bones and of the Organs of Locomotion (tuberculosis and rheumatism excepted)															
X. Other Diseases not Included in Above Groups															
XI. External Causes:															
Suicide	4	2	6							1		1			
Homicide															
Accidental poisoning															
Accidental traumatism	2		2												
Other external causes	3	3	6	1		1									
Total	338	352	690	92	90	182	18	26	44	37	12	49	3	2	5

No. 16—*Concluded.*

complete information in regard to the cause of death and is further divided under classfication.

Manic Depressive			Involution Melancholia			Dementia Praecox			Paranoia and Paranoid Conditions			Epileptic Psychoses			Psychoneuroses and Neuroses			With Psychopathic Personality			With Mental Deficiency			All Other Psychoses		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
...	1	1	...	...	...	4	2	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	2	..	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	..	1
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	1	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	1	1	...	...	...	1	..	1	...	...	...
...	1	1	1	..	1	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	..	1	1	..	1	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	1	1	..	1	2	..	2	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...
...	1	1	1	..	1	...	1	1	...	...	...	...	...	...	1	1	...	...	...	...	1	..	1	...	...	...
21	27	48	8	14	22	75	85	160	6	11	17	26	25	51	2	4	6	...	...	...	37	33	70	13	23	36

TABLE

Shows the age of the patients at the time of death in groups from under fifteen years

Psychoses	Total			Under 15 Years			15–19 Years			20–24 Years			25–29 Years			30–34 Years		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	2	...	2	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
2. Senile	94	100	194	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
3. With cerebral arteriosclerosis	21	25	46	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
4. General paralysis	35	12	47	...	..	..	...	..	..	...	..	..	...	1	1	2	1	3
5. With cerebral syphilis	3	1	4	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
6. With Huntington's chorea	...	3	3	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
7. With brain tumour	1	1	2	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
8. With other brain or nervous diseases	1	2	3	...	..	..	...	..	..	...	..	..	...	..	..	1	..	1
9. Alcoholic	3	1	4	...	..	..	...	..	..	...	..	..	...	..	..	1	..	1
10. Due to drugs and other exogenous toxins	...	...	...	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
11. With pellagra	...	1	1	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
12. With other somatic diseases	4	9	13	...	..	..	...	..	..	...	1	1	...	1	1	...	1	1
13. Manic-depressive	20	22	42	...	..	..	...	..	..	...	..	..	1	1	2	...	2	2
14. Involution melancholia	9	19	28	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
15. Dementia praecox	72	88	160	...	..	..	...	1	1	1	1	2	4	3	7	8	5	13
16. Paranoia or paranoid conditions	3	3	6	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
17. Epileptic psychoses	27	20	47	1	..	1	1	..	1	1	2	3	2	1	3	5	1	6
18. Psychoneuroses and neuroses	...	1	1	...	..	..	...	..	..	...	..	..	...	1	1	...	..	..
19. With psychopathic personality	...	...	...	...	..	..	...	..	..	...	..	..	...	..	..	...	..	..
20. With mental deficiency	16	11	27	...	..	..	2	..	2	2	..	2	2	..	2	2	1	3
21. Undiagnosed psychoses	3	3	6	...	..	..	...	..	..	...	1	1	1	..	1	...	..	..
22. Without psychoses	24	30	54	4	5	9	5	3	8	3	2	5	...	1	1	...	4	4
Total	338	352	690	5	5	10	8	4	12	7	7	14	10	9	19	19	15	34

No. 17

of age, to seventy years and over, and is also divided under principal psychoses.

35–39 Years			40–44 Years			45–49 Years			50–54 Years			55–59 Years			60–64 Years			65–69 Years			70 Years and over			Unascertained		
M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1	..	1	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	1	...	1	...	..	..
...	..	...	...	..	...	...	..	...	...	2	2	4	4	8	10	9	19	12	16	28	68	69	137	...	..	..
...	1	1	...	1	1	...	2	2	2	2	4	4	4	8	3	5	8	6	5	11	6	5	11	...	..	..
8	1	9	6	1	7	5	1	6	6	3	9	2	2	4	4	1	5	2	..	2	...	...	...	...	1	1
...	..	...	...	..	...	...	..	...	1	..	1	...	1	1	1	..	1	1	..	1	...	...	...	...	..	..
...	1	1	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	2	2	...	..	..
...	..	...	...	..	...	1	..	1	...	..	...	...	1	1	...	..	...	...	..	...	...	...	...	...	..	..
...	..	...	...	..	...	...	..	...	...	1	1	...	1	1	...	..	...	...	..	...	...	...	...	...	..	..
...	..	...	...	..	...	...	..	...	1	..	1	...	..	...	...	1	1	...	..	...	1	...	1	...	..	..
...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	...	...	...	..	..
...	..	...	...	..	...	...	..	...	...	..	...	...	1	1	...	..	...	...	..	...	...	...	...	...	..	..
...	..	...	...	..	...	...	2	2	1	2	3	...	1	1	3	1	4	...	..	...	...	...	...	...	..	..
1	..	1	2	2	4	...	4	4	2	6	8	2	3	5	5	2	7	6	1	7	1	1	2	...	..	..
...	..	...	...	..	...	1	3	4	2	6	8	2	1	3	1	1	2	...	3	3	3	5	8	...	..	..
5	7	12	9	7	16	6	10	16	9	15	24	7	10	17	4	10	14	12	10	22	7	8	15	...	1	1
...	..	...	...	..	...	1	..	1	1	1	2	...	..	...	...	1	1	1	..	1	...	1	1	...	..	..
3	3	6	1	4	5	3	2	5	2	2	4	2	3	5	2	1	3	...	1	1	4	...	4	...	..	..
...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	...	...	...	..	..
...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	..	...	...	...	...	...	..	..
...	3	3	...	..	...	2	..	2	1	1	2	2	2	4	2	2	4	1	..	1	...	2	2	...	..	..
...	..	...	...	..	...	...	..	...	1	..	1	...	..	...	...	..	...	1	..	1	...	2	2	...	..	..
1	3	4	3	1	4	...	1	1	...	3	3	2	2	4	3	3	6	1	2	3	2	...	2	...	..	..
19	19	38	21	16	37	19	25	44	29	44	73	27	36	63	38	37	75	43	38	81	93	95	188	...	2	2

TABLE

Furnishes valuable information in regard to the length of stay in the

Psychoses	Total			Less than 1 Month			1–3 Months			4–7 Months			8–12 Months		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1. Traumatic	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...
2. Senile	94	96	190	15	18	33	15	6	21	9	14	23	9	7	16
3. With cerebral arteriosclerosis	21	25	46	4	5	9	7	6	13	2	...	2	2	4	6
4. General Paralysis	35	12	47	11	...	11	4	6	10	3	1	4	...	...	...
5. With cerebral syphilis	3	1	4	...	...	...	...	...	...	1	...	1	...	1	1
6. With Huntington's chorea	...	3	3	...	...	...	...	1	1	...	...	...	...	...	...
7. With brain tumour	1	2	3	1	...	1	...	1	1	...	...	...	...	...	...
8. With other brain or nervous diseases	1	1	2	1	1	2	...	...	...	...	...	...	...	...	...
9. Alcoholic	3	1	4	2	...	2	...	1	1	...	...	...	...	...	...
10. Due to drugs or other exogenous toxins	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11. With pellagra	...	1	1	...	...	...	...	1	1	...	...	...	...	...	...
12. With other somatic diseases	4	9	13	1	7	8	3	0	3	...	...	...	...	...	...
13. Manic-depressive	19	22	41	2	6	8	4	5	9	...	2	2	2	...	3
14. Involution melancholia	4	17	21	1	4	5	...	4	4	...	1	1	1	1	2
15. Dementia praecox	72	85	157	1	6	7	1	2	3	2	1	3	1	3	4
16. Paranoid or paranoid conditions	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...
17. Epileptic psychoses	27	20	47	...	...	...	2	1	3	4	...	4	1	1	2
18. Psychoneuroses and neuroses	1	2	3	...	...	...	...	1	1	1	...	1	...	...	...
19. With psychopathic personality	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20. With mental deficiency	16	11	27	1	...	1	4	...	4	...	...	...	1	1	2
21. Undiagnosed psychoses	3	3	6	...	1	1	2	...	2	...	...	...	...	...	...
22. Without psychoses	29	38	67	2	2	4	5	2	7	4	...	4	...	1	1
Total	338	352	690	42	50	92	47	37	84	26	19	45	17	19	36

No. 18

various Institutions of patients who died during the current year.

1–2 Years			3–4 Years			5–6 Years			7–8 Years			9–10 Years			11–12 Years			13–14 Years			15–19 Years			20 Years and Over		
M.	F.	T.	M.	F.	T,	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...	...	...	...	1	..	1	...	...	...
22	17	39	8	7	15	2	7	9	2	7	9	1	2	3	1	0	1	1	3	4	1	2	3	8	6	14
3	3	6	...	1	1	1	3	4	1	..	1	...	2	2	1	..	1	...	..	...	...	1	1	...	..	...
10	3	13	2	1	3	2	..	2	1	1	2	2	..	2	...	..	...	...	..	...	...	..	...	...	..	...
1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	...	...	...	...	...	...
...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	..	...	...	...	...	...	...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2	5	7	2	1	3	1	..	1	...	...	...	1	..	1	...	...	...	...	1	1	1	..	1	4	2	6
1	2	3	...	1	1	...	2	2	1	..	1	...	...	...	...	...	...	...	1	1	...	...	...	...	1	1
10	11	21	8	11	19	7	7	14	8	9	17	4	5	9	3	3	6	2	6	8	3	6	9	22	18	40
1	..	1	2	..	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2	2
...	3	3	5	4	9	3	1	4	3	2	5	1	2	3	3	..	3	2	1	3	2	3	5	1	2	3
...	..	...	...	..	...	...	...	...	...	..	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...
...	..	...	...	..	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	3	6	3	..	3	1	2	3	...	2	2	...	...	...	...	1	1	1	..	1	...	1	1	2	1	3
...	..	...	...	..	...	...	...	...	1	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
5	6	11	1	3	4	2	3	5	...	6	6	...	2	2	2	2	4	...	..	...	1	1	2	7	7	14
58	56	114	31	29	60	19	27	46	18	27	45	10	14	24	10	6	16	7	12	19	9	15	24	44	41	85

TABLE No. 19

Shows the abnormal conditions in relations of first admissions, classified with reference to principal psychoses.

Psychoses	Total No.	Psychoses	Neuroses	Mental Deficiency	Suicidal Attempts	Psychopathic Personality	Alcohol, Drugs, etc.	Unascertained	Denied
1. Traumatic psychoses	4	1	.....	.....	.....	.....	.....	.....	3
2. Senile psychoses	209	29	3	.....	1	1	3	90	82
3. Psychoses with cerebral arteriosclerosis	75	19	3	1	.....	.....	2	16	34
4. General paralysis	86	10	2	.....	1	.....	3	32	38
5. Psychoses with cerebral syphilis	6	.....	.....	.....	.....	.....	.....	4	2
6. Psychoses with Huntington's chorea	8	3	.....	.....	.....	.....	.....	4	1
7. Psychoses with brain tumour	2	.....	.....	.....	1	.....	.....	.....	1
8. Psychoses with other brain or nervous diseases	9	.....	.....	.....	.....	.....	1	1	7
9. Alcoholic psychoses	27	.....	1	.....	.....	.....	5	13	8
10. Psychoses due to drugs and other exogenous toxins	7	.....	1	1	.....	.....	1	1	3
11. Psychoses with pellagra	.....	.....	.....	.....	.....	.....	.....	.....	.....
12. Psychoses with other somatic diseases	46	12	4	.....	.....	.....	.....	10	20
13. Manic-depressive psychoses	212	54	7	3	4	.....	7	22	115
14. Involution melancholia	69	12	8	.....	2	1	.....	3	43
15. Dementia praecox (schizophrenia)	429	104	17	7	8	.....	12	49	232
16. Paranoia or paranoid conditions	33	3	1	.....	.....	.....	1	7	21
17. Epileptic psychoses	39	6	.....	1	.....	.....	1	11	20
18. Psychoneuroses and neuroses	27	6	.....	.....	.....	.....	.....	6	15
19. Psychoses with psychopathic personality	2	.....	.....	1	1	.....	.....	.....	.....
20. Psychoses with mental deficiency	71	16	.....	5	2	.....	1	20	27
21. Undiagnosed psychoses	18	7	1	.....	.....	.....	1	5	4
22. Without psychoses	223	140	5	3	.....	1	5	21	48
Total	1,602	422	53	22	20	3	43	315	724

TABLE No. 20

To those interested in the matter of the religion of the patients, this table furnishes a classification under the Church headings, for admissions of the year, the total number in residence, and the admissions since the opening of the Hospitals.

Religion	Admissions of Year			In Residence			Admissions Since Opening		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Baptists	52	63	115	236	254	490	1,428	1,595	3,023
Congregationalists	3	.....	3	4	3	7	59	54	113
Anglicans	203	211	414	835	979	1,814	7,293	7,250	14,543
Jews	27	27	54	68	66	134	145	144	289
Presbyterians	169	172	341	659	809	1,468	6,294	6,321	12,615
Roman Catholics	253	208	461	1,106	982	2,088	7,702	6,734	14,436
United Church	226	209	435	839	1,021	1,860	7,386	7,895	15,281
Other Denominations	147	124	271	517	608	1,125	3,335	2,664	5,999
Unascertained	69	88	157	462	326	788	1,860	979	2,839
Total	1,149	1,102	2,251	4,726	5,048	9,774	35,502	33,636	69,138

TABLE No. 21

This table should prove interesting in the study of the vocations of the patients admitted during the current year. It will be noted that the mechanical class has been divided as between outside and inside work.

Occupation	Admitted this year		
	Male	Female	Total
Professional:			
Clergy, military and naval officers, physicians, lawyers, architects, artists, authors, civil engineers, surveyors, etc	23	14	37
Commercial:			
Bankers, merchants, accountants, clerks, salesmen, stenographers, typewriters, etc	125	49	174
Agricultural and Pastoral:			
Farmers, gardeners, stockmen, etc	196	.....	196
Mechanics at Outdoor Vocations:			
Railway and stationary engineers, blacksmiths, carpenters, engine fitters, sawyers, painters, police, etc	84	.....	84
Mechanics, etc., at Sedentary Vocations:			
Shoemakers, bookbinders, compositors, weavers, tailors, seamstresses, bakers, factory workers, etc	90	42	132
Domestic Service:			
Waiters, cooks, servants, etc	17	187	204
Education and Higher Domestic Duties:			
Governesses, teachers, students, housekeepers, nurses, etc	23	545	568
Miners, marine engineers, railway employees, seamen, etc	22	.....	22
Labourers	359	.....	359
No occupation	195	250	445
Unascertained	15	15	30
Total	1,149	1,102	2,251

TABLE No. 22

This table is a geographical study in regard principally to the Province of Ontario, and shows from what Counties in the Province the patients came, classified under the headings, admitted during the year, and remaining in residence. It also furnishes statistics in regard to warrant cases, by showing those admitted during the year, and admitted since the opening of the Hospital.

Counties and Districts	Admitted during Year			Admitted since Opening			Remaining in Residence		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
Algoma District	13	15	28	334	245	579	135	117	252
Brant	9	12	21	489	527	1,016	71	75	146
Bruce	20	15	35	517	481	998	68	80	148
Carleton	47	43	90	1,330	1,383	2,713	210	240	450
Cochrane	19	9	28	37	16	53	19	10	29
Dufferin	1	3	4	38	63	101	13	14	27
Dundas	3	3	6	238	215	453	20	17	37
Durham	9	5	14	386	389	775	40	41	81
Elgin	13	19	32	516	504	1,020	56	71	127
Essex	42	26	68	717	682	1,399	129	134	263
Frontenac	26	24	50	1,053	957	2,010	78	72	150
Glengarry	13	4	17	275	261	536	26	25	51
Grenville	6	2	8	310	299	609	33	23	56
Grey	11	13	24	650	562	1,212	104	82	186
Haldimand	9	7	16	268	248	516	29	28	57
Haliburton	2	2	4	13	18	31	8	8	18
Halton	6	5	11	300	293	593	22	23	45
Hastings	18	14	32	706	671	1377	98	90	188
Huron	8	13	21	634	667	1,301	63	79	142
Kenora	2	2	4	22	31	53	6	10	16
Kent	16	20	36	526	522	1,048	69	76	145
Lambton	13	14	27	697	598	1,295	79	72	151
Lanark	12	14	26	497	480	977	64	58	122
Leeds	21	21	42	578	574	1,152	53	85	138
Lennox and Addington	11	9	20	370	335	705	41	36	77
Lincoln	23	17	40	464	422	886	56	48	104
Manitoulin	2	2	4	32	25	57	17	16	33
Middlesex	44	52	96	1,756	1,743	3,499	180	229	409
Muskoka District	2	4	6	186	151	337	62	65	127
Nipissing District	17	6	23	331	246	577	58	28	86
Norfolk	10	13	23	286	323	609	29	42	71
Northumberland	9	12	21	496	564	1,060	70	79	149
Ontario	16	25	41	726	692	1,418	82	71	153
Oxford	20	15	35	629	549	1,178	63	75	138
Parry Sound District	8	4	12	174	152	326	30	27	57
Peel	1	2	3	320	372	692	12	34	46
Perth	19	9	28	591	575	1,166	76	71	147
Peterborough	17	17	34	435	510	945	68	85	153
Prescott	4	11	15	249	235	484	56	52	108
Prince Edward	6	4	10	204	193	397	28	17	45
Rainy River District	8	1	9	102	57	159	15	11	26
Renfrew	9	13	22	425	449	874	56	71	127
Russell	6	5	11	138	120	258	31	35	66
Simcoe	27	19	46	1,073	927	2,000	110	117	227
Stormont	7	7	14	386	339	725	33	43	76
Sudbury	12	5	17	102	73	175	27	20	47
Temiskaming	12	4	16	189	92	281	37	20	57
Thunder Bay District	25	20	45	324	225	549	65	59	124
Victoria	2	8	10	486	472	958	42	55	97
Waterloo	15	35	50	539	571	1,110	74	96	170
Welland	71	76	147	419	444	863	72	72	144
Wellington	13	19	32	737	751	1,488	84	98	192
Wentworth	59	74	133	2,121	2,092	4,213	271	297	568
York	377	361	738	8,941	9,070	18,011	1,053	1,457	2,510
Unascertained	5	2	7	677	193	870	39	18	57
Other Provinces	11	7	18	152	45	197	38	6	44
Total	1,207	1,163	2,370	35,191	33,693	68,884	4,468	4,980	9,448

ANNUAL DENTAL REPORT

For practically nine months of the period which this report covers, new arrangements have been made in the majority of the hospitals in regard to dental work. At each hospital a dental clinic is now held for a certain number of days each week, and the following table shows the various dental operations carried on at the different hospitals for periods of from seven to nine months.

	Brockville, Dr. Woodrow	Cobourg, Dr. Kerr	Hamilton, Dr. Kappele	Kingston, Dr. Reuton	London, Dr. Smyth	Mimico, Dr. Hall	Orillia, Dr. Seymour	Penetanguishene, Dr. King	Toronto, Dr. Hodgins	Whitby, Dr. Beaton	Woodstock, Dr. Heath	Mercer, Dr. Black	Guelph, Dr. Wing	Burwash, Dr. Brownlee	Bowmanville, Dr. Bonnycastle	Totals
Number of half days	35	37	77	79	118	105	191	18	117	114	27	37	31	45	30	1,061
Patients examined	391	432	207	246	956	269	352	232	261	1,104	250	180	75	400	208	5,563
Public charge, patients treated	360	366	77	386	.....	582	.....	174	1,032	423	.....	246	73	377	152	4,248
Private charge, patients treated	.....	36	22	24	.....	.....	.....	.....	.....	422	.....	.....	.....	24	.....	528
Extractions	359	265	408	296	5,278	443	675	639	429	1,275	802	345	65	348	34	11,661
General anaesthetics	50	.....	4	48	316	.....	33	.....	43	2	65	.....	.....	3	.....	564
Local anaesthetics	4	.....	.....	242	182	.....	.....	95	183	.....	.....	345	.....	.....	.....	1,051
Amalgum or cement fillings	122	54	205	198	.....	180	216	2	91	125	108	439	19	133	192	2,084
Pyorrhea treatments	27	1	138	69	45	239	118	4	90	62	29	.....	5	44	2	873
Other treatments	6	.....	178	280	.....	3	137	.....	136	82	2	3	7	4	19	857
Prophylaxis	124	346	91	33	.....	276	58	.....	126	248	35	1	.....	32	94	1,464
Replacements	7	1	14	10	.....	.....	30	.....	24	6	.....	2	1	7	.....	102
Dentures repaired	4	3	16	1	6	10	16	1	22	10	.....	.....	.....	2	.....	91
Other work	7	6	10	321	6	.....	4	.....	175	1,270*	10	.....	3	8	22	1,842

NOTE—Woodstock and Bowmanville 7 months only.
Mimico, Guelph and Burwash 8 months only.
All others for 9 months.
*Films taken by Dr. Webster.

PER CAPITA COST STATEMENT

The foregoing tables have dealt with the various classifications of the patients, but the report would be incomplete without information as to the cost of operations of the various hospitals.

The following table shows the per capita cost of maintaining each patient per day and is shown divided under the different items of expenditure.

Items	Brockville	Cobourg	Hamilton	Kingston	London	Mimico	Orillia	Penetang	Toronto	Whitby	Woodstock
	cents	cents	cents	cents	cents	cents	cents	cents	cents	cents	cents
Medicines	2.09	2.08	1.39	1.76	1.95	1.71	1.28	1.12	1.53	1.78	7.19
Provisions	20.19	20.44	19.90	23.62	18.31	21.74	15.51	17.72	23.13	21.11	24.03
Fuel, light and water	12.90	13.92	10.65	22.31	8.02	12.34	8.92	11.68	11.78	12.55	16.68
Clothing	4.44	3.56	3.30	5.56	4.01	4.71	4.27	4.48	4.18	5.23	2.22
Laundry and cleaning	2.04	1.59	1.44	2.50	2.20	2.29	1.68	1.31	2.74	2.54	4.10
Furniture and furnishings	5.62	6.85	5.42	6.57	4.57	7.21	6.24	3.38	6.65	5.47	5.13
Office expense	.48	.29	.36	.47	.28	.47	.32	.16	.38	.57	.95
Allowances	9.50	6.32	11.82	10.74	5.96	8.75	4.29	7.05	7.78	7.92	11.17
Feed and fodder	5.46	.....	4.03	2.26	3.46	.40	1.91	3.97	.12	2.83	9.18
Farm expense	1.68	.70	1.00	1.92	1.98	1.28	.94	1.91	.31	2.15	5.60
Contingencies	1.91	1.31	1.44	1.79	.84	1.47	1.24	.44	.71	1.17	2.03
Salaries	59.21	31.31	49.72	62.35	45.14	52.71	34.56	48.99	44.37	40.82	80.78
Total Gross per Capita	125.52	88.37	110.47	141.85	96.72	115.08	81.16	102.21	103.68	104.14	169.06
Less Recoveries	27.76	10.98	37.10	28.98	34.45	33.97	17.59	18.98	31.80	38.31	71.32
Net per Capita Cost	97.76	77.39	73.37	112.87	62.27	81.11	63.57	83.23	71.88	65.83	97.74
Repairs to Building Expense	10.40	20.96	15.91	18.38	11.13	35.09	10.27	6.26	17.14	8.72	35.19
Total per Capita Payable by Province	$1.08.16	.98.35	.89.28	1.31.25	.73.40	1.16.20	.73.84	.89.49	.89.02	.74.55	1.32.93

REPORT

OF THE

Ontario Board of Parole

For the Year ending October 31st

1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 16

ONTARIO

TORONTO
Printed and Published by the Printer to the King's Most Excellent Majesty
1929

PRODUCED BY
The United Press
LIMITED
TORONTO
CANADA

To The Honourable William Donald Ross,
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

The undersigned has the honour to transmit to Your Honour the Annual Report of the Ontario Board of Parole for the year ending October 31st, 1928.

Respectfully submitted,

L. Goldie,
Provincial Secretary.

Toronto, February 6th, 1929.

Toronto, February 1st, 1929.

To The Honourable Lincoln Goldie, M.P.P.,
Provincial Secretary and Registrar, Ontario.

Sir:

I have the honour to present herewith the Annual Report of the Ontario Board of Parole for the year ending October 31st, 1928.

I have the honour to be, Sir,

Your obedient servant,

Alfred E. Lavell,
Secretary.

REPORT OF THE ONTARIO BOARD OF PAROLE FOR YEAR ENDING OCTOBER 31, 1928

In submitting the report for the past year, a comparative statement is given below from which it will be seen that the number of cases dealt with was larger than any previous year, involving a greater amount of labour and necessitating the full time of the three officers which we were fortunate in having, and also making it necessary to add another stenographer to our office staff.

The statistical record for the year is as follows:

Meetings of the Board	26
Cases dealt with	1,680
Paroles authorized	650
Paroles put into effect	369
Disappeared	35
Committed crime while on parole	31
Sent back and parole cancelled	24
Recommended for Extra Mural Employment (Cap. 163, R.S.C., ss. 13-15, 49, 61)	305
Recommended for ticket-of-leave	5

The following is the record for four previous years:

	1916	1925	1926	1927
Cases dealt with	164	1,347	1,296	1,364
Paroles authorized	52	408	473	504
Disappeared	.....	25	41	46
Committed crime on parole	No record	41	16	18
Sent back and parole cancelled			30	21
Recommended for Extra Mural Employment	.....	108	116	141
Recommended for ticket-of-leave	23	25	16	11

In the above figures for 1925 we are not able to give the number who committed crime on parole as distinct from those whose paroles were merely cancelled. The total for these two in that year was 41, which is about the same as in other years.

It will be noted that the number of paroles authorized was considerably in excess of those put into effect. The reason for this is that in a large number of cases the parole was authorized to take effect at a later date than the end of the fiscal year. There are also a number authorized in every year which cannot be put into effect because of inability to meet the conditions. Sometimes there is misbehaviour by the prisoner in the institution. Sometimes work is not available. At other times facts come to light which were not available when the decision of the Board was given. In a number of cases paroles are authorized to take place the following spring when farm positions will be open.

The percentage of failures should, of course, be computed upon the number actually paroled and on this basis the percentage of custodial failures (that is, persons on parole who disappeared or committed crime) was about 18 per cent. of those actually paroled. Considering the salvage nature of our work and the kind of material we deal with, this would appear to be a very fair figure and means that over 80 per cent. of those paroled made good, at least during the period of supervision, and from past experience it can be confidently expected that the majority of these will continue to succeed. We had to return twenty-four persons to the institutions from which they were paroled because it was considered unfair to the public to try them outside for the full period of their sentence. Their behaviour under supervision was not such as made it wise to continue them further on parole.

As in past years, the failures fall into two classes: those who broke faith when there was nothing apparent in their past history that would lead one to expect failure, and those who when paroled were considered rather doubtful risks, but to whom it was considered proper to give a chance of reformation, the indeterminate sentence having been given by the Court for that purpose. The fundamental aims of the Board are the re-establishment of criminals, the prevention of crime and the protection of the public. It is believed that in many cases the parole of a prisoner is more likely to accomplish these objects than his retention in prison until the end of his full sentence, but every prisoner is paroled under certain specific and strict conditions, and if these conditions are not faithfully kept the Board does not consider it safe either for the public or the prisoner to keep him outside on parole. He is with regret sent back, but no prisoner is returned to the institution without urgent cause, as we believe that our duty is to guide as many as possible into civil re-establishment. Sometimes warnings and caution are effective. When these fail there is only one recourse and that is return to close custody.

The personnel of the Board is as follows: Chairman, Mr. G. S. Matthews; Vice-Chairman, Mr. W. A. Evans; Vice-Chairman, Judge Emerson Coatsworth; Mr. J. B. Tudhope, Mr. D. Miller, Judge J. F. McKinley, Dr. F. C. Grenside, Mrs. D. M. Brodie, and Mr. G. B. Woods.

The executive staff consists of Dr. Alfred E. Lavell, Secretary and Chief Officer; Mr. E. J. Etherington and Mr. T. D. Bell, Parole Inspectors. The clerk staff consists of four stenographers and a filing clerk.

Signed on behalf of the Ontario Board of Parole.

GEO. S. MATTHEWS,
Chairman.

Sixth Annual Report

OF THE

COMMISSIONER

FOR THE

Extra Mural Employment of Sentenced Persons

For the Year Ending October 31st

1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 33

ONTARIO

TORONTO
Printed and Published by the Printer to the King's Most Excellent Majesty
1929

Toronto, February 6th, 1929.

To The Honourable William Donald Ross,
Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

The undersigned has the honour to transmit to Your Honour the Annual Report of the Commissioner under The Extra Mural Employment of Sentenced Persons Act, for the year ending October 31st, 1928.

Respectfully submitted,

L. Goldie,
Provincial Secretary.

Toronto, February 1st, 1929.

To The Honourable Lincoln Goldie, M.P.P.,
Provincial Secretary and Registrar, Ontario.

Sir:

I have the honour to present herewith the Annual Report of the Commissioner for the Extra Mural Employment of Sentenced Persons for the year ending October 31st, 1928.

I have the honour to be, Sir,

Your obedient servant,

Alfred E. Lavell,
Commissioner.

REPORT OF THE COMMISSIONER FOR THE EXTRA MURAL EMPLOYMENT OF SENTENCED PERSONS (OFFENDERS AGAINST DOMINION LAW) FOR YEAR ENDING OCTOBER 31st, 1928

The powers and duties of the Commissioner are stated in the regulations approved by the Lieutenant-Governor in Council and given in each specific case by an Order-in-Council. The statutory basis is Chapter 163, R.S.C. (1927), Sections 13-15, 49 and 61.

Gaols

13. The Lieutenant-Governor of any province may, from time to time, make regulations for the purpose of preventing escapes and preserving discipline in the case of prisoners in any common gaol or prison employed beyond the limits of such common gaol or prison.

14. After such regulations are made, the Lieutenant-Governor may, from time to time, direct or authorize the employment, upon any specific work or duty, beyond the limits of any common gaol or prison, of any prisoner who is sentenced to be imprisoned with hard labour in such gaol, for any offence against any law of Canada.

15. Every such prisoner shall, during such employment, be subject to such regulations and to all the rules, regulations and discipline of the gaol or prison so far as applicable.

16. No such prisoner shall be so employed, except under the strictest care and supervision of officers appointed to the duty.

Reformatory and Industrial Farms

49. The Lieutenant-Governor may, from time to time, authorize direct or sanction the employment upon any specific work or duty without or beyond the limits of the Ontario Reformatory or an Industrial Farm of any of the prisoners confined or sentenced to be imprisoned therein or transferred thereto, as herein provided.

2. All such prisoners shall, during such last-mentioned employment, be subject to such rules, regulations and discipline as are approved by the Lieutenant Governor in that behalf.

Mercer Reformatory

61. The Lieutenant-Governor may from time to time authorize, direct or sanction the employment upon any specific work or duty without or beyond the limits of the Reformatory or Industrial Farm of any female confined or sentenced to be imprisoned or transferred thereto as herein provided.

All such prisoners shall, during such last-mentioned employment, be subject to such rules, regulations and discipline as are approved by the Lieutenant-Governor in that behalf.

Statistical Record

	1927–1928	Total for eight years
Permits put into effect	254	1,666
Custodial failures	12	73
Aggregate days served outside	50,609	192,013
Wages earned, all going solely to prisoners and families (cir.)	$100,000.00	$423,000.00
Total cost of system except for service of Parole Office (cir.)	800.00	6,300.00
Saving to Province in maintenance (cir.)	56,000.00	201,000.00

Of the twelve custodial failures above noted, eight disappeared and four committed crime and were reapprehended. All the rest of those placed outside on permit did well, except ten whom it was considered wise for various reasons to place back inside the institution.

It will be noted that the total number of custodial failures for the year continues to be less than 5 per cent. This has been the consistent record for each of the eight years of the system with a slight variation of a small fraction of 1 per cent.

The system represents the equivalent of an institution having a daily population of from 50 to over 100 prisoners throughout the year. Its financial value to the Province, therefore, is not inconsiderable, and because its office and other work is performed by those who are on the staff of the Board of Parole, the cost of the system is very small indeed.

The Commissioner continues to receive the most hearty and effective co-operation from all quarters. The Board of Parole gives him the benefit of its judgment in recommending for permits certain inmates who are interviewed by it at the various Provincial Institutions. The public generally, including the police, the Salvation Army, clergymen and others, have given most willing and efficient services in the supervision of prisoners placed outside on permit. Courts and custodians have given valuable counsel and other assistance. Without this co-operation the system would be impossible.

The best results of the system are not the financial. It has saved thousands of innocent dependents of prisoners from suffering which would have been caused had the prisoners been compelled to remain and work inside the institutions during their full terms. This has been done without any interference with the sentence of the Court which inflicted loss of liberty for a certain time. The term has not been shortened. The time and energies of the prisoner have been used to the best economic advantage of the Province and all concerned. The system has also resulted in the re-establishment of a large number of prisoners as citizens who merely needed strict control and who, having been given permission to support their families, were placed upon possibly the only road which could have led to their successful return into society as free citizens at the end of their sentence.

It would appear to be unnecessary at present to go into further detail as my exhaustive report for the first five years is on record and it seems unnecessary to repeat what was therein stated. It is the hope of the Commissioner to give a similar detailed report after the system has been in operation ten years.

Alfred E. Lavell,
Commissioner.

FIFTY-NINTH ANNUAL REPORT

OF THE

INSPECTOR OF PRISONS AND PUBLIC CHARITIES

UPON THE

Hospitals and Charitable Institutions

OF THE

PROVINCE OF ONTARIO

BEING FOR THE YEAR ENDING 30th SEPTEMBER

1928

Sessional Paper No. 17, 1929

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ONTARIO

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Hospitals and Charitable Institutions

The Fifty-ninth Annual Report of the Hospitals and Charitable Institutions for the Province of Ontario, for the year ending September 30th, 1928, is presented herein. The grouping of the General Hospitals according to size, which was first carried out in the last Annual Report, proved so beneficial for comparative purposes that it has been continued in this report. The Governing Boards of the various Institutions listed in this report are respectfully requested to compare the standing of their own Institutions with that of others in the same group.

An explanatory note accompanies each table, showing the information that may be derived from the statistics given.

There are operating at the present time in the Province of Ontario:

113 Public Hospitals.
19 Red Cross Outpost Hospitals.
6 Hospitals for Incurables.
10 Public Sanatoria.
43 City Refuges.
3 Convalescent Homes.
32 Orphanages.
31 County Houses of Refuge.
68 Private Hospitals.
2 Private Sanatoria.
2 Private Sanitaria (Mental).

During the current hospital year two new public hospitals have been listed for Government Aid, the Metropolitan General Hospital at Walkerville and the Stevenson Memorial Hospital at Alliston. It will also be noted that two additional Red Cross Outpost Hospitals were opened at Coe Hill and Redditt. In addition to the above, St. Mary's Convalescent Home, Toronto, Misericordia Orphanage, Ottawa, and four additional Private Hospitals have been added during the year.

All institutions have received as far as possible official visits of inspection during the year, and those entitled to Government aid in accordance with the Statutes have shared in the grants voted by the Legislature.

Provincial Aid to Hospitals

1. A Provincial grant is made for all patients in the hospital during the first ten years of its existence at the rate of sixty cents per day, irrespective of the amount contributed by the patients.

2. After a hospital has been in existence for ten years, the grant is paid only for patients for whose maintenance, $12.25 per week, or less, is contributed.

3. In all cases the limit is 120 days, and for patients remaining beyond that period the refuge rate of ten cents per day is allowed.

4. No allowance is made for infants born in hospital, wards of the Department of Indian Affairs, or D.S.C.R. patients.

Public Hospitals and Sanatoria

From the statistical tables the following items have been selected, in connection with the Public General Hospitals, Red Cross Outpost Hospitals, Hospitals for Incurables, and Sanatoria, which appear to be of special interest:

	General Hospitals	Red Cross Outpost Hospitals	Hospitals for Incurables	Sanatoria	Totals
Number of patients in hospitals on October 1st, 1927	6,429	65	547	1,710	8,751
Number of patients admitted during the year	167,467	2,100	293	2,122	168,780
Number of births during the year	19,527	308	.....	3	19,459
Total number under treatment	193,535	2,473	840	3,835	196,990
Patients remaining in September 30th, 1927	6,541	75	621	1,829	9,228
Total number of deaths during the year	8,842	114	156	413	9,392
Percentage of deaths to number under treatment	4.59	4.61	.....	.....	.....
Total number of days' stay	2,652,591	25,529	199,026	765,599	3,642,745
Total maintenance expenditure	$8,762,628.52	$114,076.24	$404,032.27	$1,456,309.61	$10,738,046.64
Average cost per patient per day	3.93	5.19	2.03	1.89	.....
Total bed capacity	10,651	151	797	1,971	13,420
Average number of beds per 1,000 population, General, Red Cross, Incurable, and Sanatoria	.....	.....	.....	.....	3.93

Provincial Aid to Sanitaria

1. A grant of $4,000.00 on the erection and satisfactory equipment of the necessary buildings.

2. A grant of seventy-five cents per day for the maintenance and treatment of each indigent patient.

These grants to be in consideration of proper accommodation being provided, and only to assist in the maintenance and treatment of indigent patients from the Province of Ontario.

A. L. McPherson,
Inspector of Hospitals.

H. M. Robbins,
Deputy Provincial Secretary.

TABLE I.—This table furnishes information in regard to the bed capacity as given in the last returns from the several institutions. It also shows the number of patients treated during the year, together with the mortality statistics, and valuable comparisons may be made along these lines.

GENERAL HOSPITALS

Name of Hospital.	Location.	Bed Capacity.	Number remaining under treatment Oct. 1st, 1927.	Number admitted during the year ending Sept. 30th, 1928.	Number of births during year.	Total number under treatment during the year ending Sept. 30th, 1928.	Number discharged during the year.	Number of deaths during year.	Number under treatment on Sept. 30th, 1928.	Percentage of deaths to total number under treatment.
Group 1—Bed capacity, 1 to 25										
Stevenson Memorial	Alliston	25	.....	86	13	99	86	3	10	3.03
Rosamond Memorial	Almonte	20	17	341	71	429	400	17	12	3.96
General Hospital	Bowmanville	20	11	295	80	386	357	17	12	4.40
Peel Memorial	Brampton	23	9	238	63	310	280	20	10	6.45
Public Hospital	Clinton	25	4	215	34	253	238	8	7	3.16
Haldimand County Memorial	Dunnville	18	4	348	56	408	389	15	4	3.68
General Hospital	Durham	15	7	190	36	233	217	9	7	3.86
General and Marine	Goderich	25	7	287	53	347	324	10	13	2.88
Memorial Hospital	Hanover	19	8	185	18	211	195	6	10	2.84
Notre Dame Hospital	Hawkesbury	16	.....	269	7	276	259	9	8	3.26
St. Paul's Hospital	Hearst	14	5	270	36	311	298	7	6	2.25
Listowel Memorial	Listowel	20	7	323	40	370	354	9	7	2.43
Rosedale War Memorial	Matheson	12	2	156	37	195	187	5	3	2.56
Mount Forest General	Mount Forest	15	1	105	28	134	119	9	6	6.71
York County Hospital	Newmarket	25	13	330	76	419	393	13	13	3.10
Cottage Hospital	Niag.-on-Lake	10	3	82	14	99	90	6	3	6.06
Willett Hospital	Paris	16	9	374	73	456	428	15	13	3.29
General Hospital	Penetang	18	9	215	36	260	241	12	7	4.61
Seaforth Memorial	Seaforth	15	7	218	22	247	238	7	2	2.60
General Hospital	Sioux Lookout	16	12	359	41	412	383	20	9	4.85
Presbyterian Hospital	So. Porcupine	10	6	215	32	253	242	9	2	3.55
Brebeuf Hospital	Sturgeon Falls	15	3	147	23	173	162	8	3	4.62
Soldiers' Memorial	Tillsonburg	22	14	360	43	417	379	17	21	4.08
General Hospital	Wingham	23	5	290	35	330	318	7	5	2.12
Total		435	163	5,898	967	7,028	6,577	258	193	3.67
Group 2—Bed capacity, 25 to 50										
Lady Minto Hospital	Chapleau	34	17	417	36	470	453	10	7	2.13
Cobalt Mines Hospital	Cobalt	36	17	581	.....	598	568	19	11	3.19
General Hospital	Cobourg	35	10	481	57	548	511	23	14	4.38
Lady Minto Hospital	Cochrane	41	34	510	33	577	529	25	23	4.33
General and Marine	Collingwood	47	24	487	38	549	498	26	25	4.73
Royal Alexandra Hospital	Fergus	48	7	431	42	480	443	26	11	5.42
Alexandra Hospital	Ingersoll	30	8	237	55	300	273	24	3	8.00
Anson General	Iroquois Falls	35	12	307	49	368	354	7	7	1.90
General Hospital	Kenora	40	24	631	65	720	683	15	22	2.08
St. Joseph's Hospital	Kenora	50	23	457	69	549	500	24	25	4.37
General Hospital	Kincardine	34	21	362	80	463	416	25	22	5.39
Ross Memorial	Lindsay	35	26	769	81	876	799	53	24	6.05
Bethesda Hospital	London	50	14	236	200	450	418	9	23	2.00
St. Andrew's Hospital	Midland	45	32	749	79	860	791	46	23	5.35
Queen Victoria Hospital	North Bay	50	14	946	113	1,073	1,008	44	21	4.10
Lord Dufferin Hospital	Orangeville	35	18	361	30	409	371	28	10	6.84
Salvation Army Maternity	Ottawa	47	46	878	572	1,496	1,415	40	41	2.67
Stone Memorial Hospital	Parry Sound	35	11	429	35	475	444	24	7	5.05
St. Joseph's Hospital	" "	35	18	391	65	474	440	16	18	3.37
Cottage Hospital	Pembroke	50	32	802	56	890	819	42	29	4.72
Great War Memorial	Perth	36	30	616	51	697	650	23	24	3.29
C. E. Englehart Memorial	Petrolia	35	17	440	58	515	451	41	23	7.96
Prince Edward County	Picton	30	8	341	63	412	396	5	11	1.21
General Hospital	Port Arthur	50	24	983	51	1,058	996	32	30	3.02
General Hospital	Port Hope	26	13	591	75	679	629	37	13	5.44
Victoria General Hospital	Renfrew	50	17	669	52	738	675	36	27	4.87
Plummer Memorial	Sault Ste. Marie	31	15	563	66	644	597	24	23	3.73
Norfolk General	Simcoe	30	26	725	125	876	808	47	21	5.36
St. Francis' Hospital	Smiths Falls	50	24	434	34	492	450	20	22	4.07
General Hospital	Strathroy	50	21	453	70	544	485	38	21	6.98
Mount Sinai Hospital	Toronto	28	17	1,072	220	1,309	1,271	28	10	2.14
Orthopedic Hospital	"	40	29	940	.....	969	947	5	17	.51
General Hospital	Walkerton	26	6	356	49	411	381	21	9	5.11
Totals		1,294	655	18,645	2,669	21,969	20,469	883	617	4.02

TABLE I.—This table furnishes information in regard to the bed capacity as given in the last returns from the several institutions. It also shows the number of patients treated during the year, together with the mortality statistics, and valuable comparisons may be made along these lines.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Bed Capacity.	Number remaining under treatment Oct. 1st, 1927.	Number admitted during the year ending Sept. 30th, 1928.	Number of births during year.	Total number under treatment during the year ending Sept. 30th, 1928.	Number discharged during the year.	Number of deaths during year.	Number under treatment on Sept. 30th, 1928.	Percentage of deaths to total number under treatment.
Group 3—Bed capacity, 51 to 100										
Royal Victoria Hospital	Barrie	50	30	728	107	865	780	51	34	6.24
General Hospital	Belleville	100	67	2,189	260	2,516	2,276	173	67	6.87
General Hospital	Brockville	80	49	1,203	105	1,357	1,251	53	53	3.91
St. Vincent de Paul	"	100	61	1,072	71	1,204	1,123	50	31	4.15
Public General Hospital	Chatham	100	51	1,365	157	1,573	1,421	108	44	6.86
St. Joseph's Hospital	"	100	57	1,055	154	1,266	1,133	82	51	6.48
Cornwall General	Cornwall	80	39	880	124	1,043	955	49	39	4.69
Hotel Dieu Hospital	"	80	58	1,651	178	1,887	1,718	77	92	4.08
General Hospital	Galt	80	50	1,390	159	1,599	1,453	97	49	6.07
St. Joseph's Hospital	Guelph	75	66	1,630	148	1,844	1,714	69	61	3.74
Kitchener-Waterloo Hospital	Kitchener	50	41	1,511	132	1,684	1,554	70	60	4.16
St. Mary's Hospital	"	96	41	1,404	161	1,606	1,494	68	44	4.23
General Hospital	Mattawa	65	26	369	9	404	366	12	26	2.97
Niagara Falls General	Niagara Falls	58	33	1,264	116	1,413	1,294	76	43	5.38
Orillia Soldiers Memorial	Orillia	75	38	1,278	179	1,495	1,401	41	53	2.72
Oshawa General	Oshawa	95	51	1,932	306	2,289	2,169	84	36	1.57
Misericordia Maternity Hosp.	Ottawa	50	27	214	197	438	392	27	19	6.16
Ottawa Protestant Children's	"	65	17	282	.....	299	264	16	19	5.35
General and Marine Hospital	Owen Sound	74	32	1,123	173	1,328	1,220	58	50	4.37
Nicholls Hospital	Peterborough	90	45	1,592	278	1,915	1,729	121	65	6.32
St. Joseph's Hospital	"	85	49	1,177	200	1,426	1,319	61	46	4.28
General Hospital	St. Catharines	100	71	2,295	245	2,611	2,411	135	65	5.17
Memorial Hospital	St. Thomas	100	56	1,715	210	1,981	1,833	96	52	4.84
General Hospital	Sarnia	70	47	1,070	206	1,323	1,214	60	49	4.53
Public Hospital	Smiths Falls	67	30	698	93	821	766	35	20	4.26
St. Mary's Hospital	Timmins	75	24	873	37	934	857	32	45	3.42
St. John's Hospital	Toronto	50	39	1,763	1	1,803	1,732	25	46	1.39
Salvation Army Women's	"	50	64	1,083	700	1,847	1,750	54	43	2.98
Wellesley Hospital	"	100	82	2,474	272	2,828	2,661	82	85	2.90
Women's College Hospital	"	51	48	1,126	412	1,586	1,475	61	50	3.84
Welland County Hospital	Welland	60	38	949	70	1,057	948	75	34	7.09
Woodstock Hospital	Woodstock	60	26	1,023	140	1,189	1,083	72	34	6.12
Total		2,431	1,453	40,378	5,600	47,431	43,756	2,170	1,505	4.66
Group 4—Bed capacity, 101 to 200										
Brantford General Hospital	Brantford	200	145	3,057	433	3,635	3,301	204	130	5.61
McKellar General	Fort William	200	104	4,741	308	5,153	4,945	115	93	2.23
Guelph General	Guelph	100	62	1,724	186	1,972	1,811	88	73	4.46
St. Joseph's Hospital	Hamilton	170	111	3,710	523	4,344	4,053	174	117	4.01
Hotel Dieu Hospital	Kingston	200	99	2,202	160	2,461	2,256	104	101	4.23
St. Joseph's Hospital	London	160	127	2,755	329	3,211	2,965	140	106	4.36
General Hospital	Pembroke	150	72	1,455	64	1,591	1,463	57	71	3.58
St. Joseph's Hospital	Port Arthur	173	75	2,579	294	2,948	2,757	89	102	3.02
General Hospital	Sault Ste. Marie	100	56	1,234	97	1,387	1,302	47	38	3.39
Stratford General	Stratford	100	64	1,435	225	1,724	1,584	76	64	4.41
St. Joseph's Hospital	Sudbury	150	63	2,310	124	2,497	2,350	75	72	3.00
St. Joseph's Hospital	Toronto	150	126	2,815	310	3,251	2,930	199	122	6.12
Metropolitan General	Walkerville	124	.....	988	224	1,212	1,083	55	74	4.54
Salvation Army Grace	Windsor	110	83	2,690	361	3,134	2,901	152	81	4.85
Hotel Dieu Hospital	"	150	109	3,842	363	4,314	4,008	205	101	4.75
Total		2,237	1,296	37,537	4,001	42,834	39,709	1,780	1,345	3.99
Group 5—Bed capacity, 200 and over										
General Hospital	Hamilton	524	387	9,220	925	10,532	9,661	477	394	4.53
Kingston General	Kingston	350	178	4,345	233	4,756	4,381	184	191	3.87
Victoria General	London	400	282	4,566	398	5,246	4,726	241	279	4.59
Ottawa Civic Hospital	Ottawa	600	342	8,239	628	9,209	8,472	386	351	4.19
General Hospital	"	225	164	4,665	104	4,933	4,630	140	163	2.84
General Hospital	Toronto	865	712	12,619	1,789	15,120	13,501	848	771	5.61
Hospital for Sick Children	"	262	270	5,538	.....	5,808	5,002	545	261	9.38
St. Michael's Hospital	"	600	273	6,483	671	7,427	6,669	411	347	5.53
Western Hospital and Grace	"	428	366	9,334	1,542	11,242	10,318	519	405	4.61
Total		4,254	2,974	65,009	6,290	74,273	67,360	3,751	3,162	5.05
Grand Totals, Gen. Hospitals		**10,651**	**6,541**	**167,467**	**19,527**	**193,535**	**177,871**	**8,842**	**6,822**	**4.59**

TABLE II.—This table furnishes information in regard to the length of stay of patients, and the comparison of the average stay in the different institutions should be valuable information for those in charge.

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Number of patients, including infants born.	Collective stay of infants under one year of age.	Collective stay of adult patients.	Total collective stay of adults and infants.	Average stay of each patient, including infants.
Group 1—Bed capacity, 1 to 25						
Stevenson Memorial	Alliston	99	108	458	566	6
Rosamond Memorial	Almonte	429	850	4,174	5,024	12
General Hospital	Bowmanville	386	875	3,898	4,773	13
Peel Memorial	Brampton	310	775	3,915	4,690	15
Public Hospital	Clinton	253	433	2,387	2,820	11
Haldimand County Memorial	Dunnville	408	676	3,869	4,545	11
General Hospital	Durham	233	692	2,845	3,537	15
General and Marine	Goderich	347	575	4,302	4,877	14
Memorial Hospital	Hanover	211	650	2,440	3,090	14
Notre Dame Hospital	Hawkesbury	276	73	3,302	3,375	12
St. Paul's Hospital	Hearst	311	414	2,595	3,009	10
Listowel Memorial	Listowel	370	436	3,535	3,971	11
Rosedale War Memorial	Matheson	195	874	923	1,797	9
Mount Forest General	Mount Forest	134	274	1,398	1,672	12
York County Hospital	Newmarket	419	912	4,619	5,531	12
Cottage Hospital	Niagara-on-the-Lake	99	146	1,257	1,403	14
Willett Hospital	Paris	456	805	4,907	5,712	12
General Hospital	Penetang	260	391	2,209	2,600	12
Seaforth Memorial	Seaforth	247	264	2,277	2,541	10
General Hospital	Sioux Lookout	412	304	3,750	4,054	11
Presbyterian Hospital	South Porcupine	253	389	2,047	2,436	10
Brebeuf Hospital	Sturgeon Falls	173	230	1,828	2,058	14
Soldiers' Memorial	Tillsonburg	417	767	4,309	5,076	11
General Hospital	Wingham	330	568	2,884	3,452	10
Total		7,028	12,481	70,128	82,609	12
Group 2—Bed capacity, 26 to 50						
Lady Minto Hospital	Chapleau	470	427	5,544	5,971	11
Cobalt Mines Hospital	Cobalt	598	2	5,991	5,993	10
General Hospital	Cobourg	548	666	4,257	4,923	9
Lady Minto Hospital	Cochrane	577	627	11,552	12,179	21
General and Marine	Collingwood	549	528	8,814	9,342	18
Royal Alexandra Hospital	Fergus	480	496	3,796	4,292	8
Alexandra Hospital	Ingersoll	300	620	3,171	3,791	12
Anson General	Iroquois Falls	368	118	3,538	3,656	11
General Hospital	Kenora	720	719	9,470	10,189	14
St. Joseph's Hospital	"	549	710	4,775	5,485	10
General Hospital	Kincardine	463	893	4,604	5,497	12
Ross Memorial	Lindsay	876	898	9,494	10,392	12
Bethesda Hospital	London	450	3,222	5,088	8,310	19
St. Andrew's Hospital	Midland	860	1,147	9,363	10,510	11
Queen Victoria Hospital	North Bay	1,073	1,098	9,123	10,221	10
Lord Dufferin Hospital	Orangeville	409	391	5,662	6,053	15
Salvation Army Maternity	Ottawa	1,496	7,529	10,719	18,248	12
Stone Memorial Hospital	Parry Sound	475	468	4,244	4,712	10
St. Joseph's Hospital	" "	474	686	4,247	4,933	10
Cottage Hospital	Pembroke	890	762	12,114	12,876	14
Great War Memorial	Perth	697	653	8,505	9,158	13
C. E. Englehart Memorial	Petrolia	515	743	6,626	7,369	14
Prince Edward County	Picton	412	601	2,996	3,597	9
General Hospital	Port Arthur	1,058	607	12,483	13,090	12
General Hospital	Port Hope	679	970	4,910	5,880	9
Victoria General	Renfrew	738	737	7,294	8,031	11
Plummer Memorial	Sault Ste. Marie	644	774	5,768	6,542	10
Norfolk General	Simcoe	876	1,490	8,115	9,605	9
St. Francis' Hospital	Smith's Falls	492	463	8,519	8,982	18
General Hospital	Strathroy	544	917	9,717	10,634	17
Mount Sinai Hospital	Toronto	1,309	1,841	6,908	8,749	6
Orthopedic Hospital	"	969	34	9,204	9,238	10
General Hospital	Walkerton	411	505	3,956	4,461	11
Total		21,969	32,342	230,567	262,909	12

TABLE II.—This table furnishes information in regard to the length of stay of patients, and the comparison of the average stay in the different institutions should be valuable information for those in charge.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Number of patients, including infants born.	Collective stay of infants under one year of age.	Collective stay of adult patients.	Total collective stay of adults and infants.	Average stay of each patient, including infants.
Group 3—Bed capacity, 51 to 100						
Royal Victoria Hospital	Barrie	865	1,589	10,709	12,298	14
General Hospital	Belleville	2,516	2,589	30,267	32,856	13
General Hospital	Brockville	1,357	1,324	17,829	19,153	14
St. Vincent de Paul	"	1,204	886	20,439	21,325	18
Public General Hospital	Chatham	1,573	1,923	18,740	20,663	13
St. Joseph's Hospital	"	1,266	2,352	14,437	16,789	13
Cornwall General	Cornwall	1,043	1,561	14,982	16,543	15
Hotel Dieu Hospital	"	1,887	1,991	19,538	21,529	11
General Hospital	Galt	1,599	2,195	17,097	19,292	12
St. Joseph's Hospital	Guelph	1,844	1,976	25,249	27,225	15
Kitchener-Waterloo Hospital	Kitchener	1,684	1,876	16,219	18,095	10
St. Mary's Hospital	"	1,606	2,171	13,918	16,089	11
General Hospital	Mattawa	404	246	8,452	8,698	21
Niagara Falls General	Niagara Falls	1,413	1,243	16,192	17,435	12
Orillia Soldiers' Memorial	Orillia	1,495	1,827	16,645	18,472	12
Oshawa General	Oshawa	2,289	4,435	16,555	20,990	9
Misericordia Maternity Hospital	Ottawa	438	2,805	3,367	6,172	14
Ottawa Protestant Children's	"	299	7,186	.....	7,186	24
General and Marine Hospital	Owen Sound	1,328	2,124	16,385	18,509	14
Nicholls' Hospital	Peterborough	1,915	3,212	21,992	25,204	13
St. Joseph's Hospital	"	1,426	2,217	15,397	17,614	12
General Hospital	St. Catharines	2,611	3,988	22,870	26,858	10
Memorial Hospital	St. Thomas	1,981	2,606	20,145	22,751	11
General Hospital	Sarnia	1,323	1,648	15,725	17,373	13
Public Hospital	Smith's Falls	821	1,079	9,899	10,978	13
St. Mary's Hospital	Timmins	934	574	12,502	13,076	14
St. John's Hospital	Toronto	1,803	19	15,112	15,131	8
Salvation Army Women's	"	1,847	8,770	14,320	23,099	12
Wellesley Hospital	"	2,828	4,080	26,072	30,152	10
Women's College Hospital	"	1,586	5,269	14,325	19,594	12
Welland County Hospital	Welland	1,057	719	9,517	10,236	10
Woodstock Hospital	Woodstock	1,189	1,320	12,627	13,947	12
Total		47,431	77,809	507,523	585,332	12
Group 4—Bed capacity, 101 to 200						
Brantford General Hospital	Brantford	3,635	9,187	46,767	55,954	15
McKellar General	Fort William	5,153	3,328	40,319	43,647	8
Guelph General	Guelph	1,972	2,289	22,571	24,860	12
St. Joseph's Hospital	Hamilton	4,344	5,554	44,615	50,169	12
Hotel Dieu Hospital	Kingston	2,461	1,737	37,822	39,559	12
St. Joseph's Hospital	London	3,211	6,101	36,427	42,528	13
General Hospital	Pembroke	1,591	1,321	31,918	33,239	20
St. Joseph's Hospital	Port Arthur	2,948	2,655	29,348	32,003	10
General Hospital	Sault Ste. Marie	1,387	1,344	20,012	21,356	14
Stratford General	Stratford	1,724	2,415	21,192	23,607	13
St. Joseph's Hospital	Sudbury	2,497	1,566	26,823	28,389	11
St. Joseph's Hospital	Toronto	3,251	3,467	41,893	45,360	14
Metropolitan General	Walkerville	1,212	2,579	8,279	10,858	9
Salvation Army Grace	Windsor	3,134	4,433	29,397	33,830	11
Hotel Dieu Hospital	Windsor	4,314	1,471	35,989	37,460	9
Total		42,834	49,447	473,372	522,819	12
Group 5—Bed capacity, 200 and over						
General Hospital	Hamilton	10,532	14,957	140,143	155,100	14
General Hospital	Kingston	4,756	1,632	73,268	74,900	15
Victoria General	London	5,246	8,195	106,267	114,462	21
Ottawa Civic Hospital	Ottawa	9,209	12,365	139,681	152,046	17
General Hospital	"	4,933	3,027	63,341	66,368	13
General Hospital	Toronto	15,120	24,033	252,602	276,635	18
Hospital for Sick Children	"	5,808	95,966 *	.....	95,960	16
St. Michael's Hospital	"	7,427	8,649	103,136	111,785	15
Western Hospital and Grace	"	11,242	17,963	133,697	151,660	13
Total		74,273	186,787	1,012,135	1,198,922	16
Grand Totals, General Hospitals		**193,535**	**358,866**	**2,293,725**	**2,652,591**	**14**

*Children only.

TABLE III.—Shows the proportion of pay patients to the total amount, and it will be noted that there is a wide variation of these between the different institutions. It also shows the number of days for which Government grant is allowed.

GENERAL HOSPITALS—Continued

Name of Hospital	Location	Collective days' stay exclusive of infants under one year of age	Deduction for incurable and lying-in patients. (Refuge rate)	Deduction for pay patient days	No. of days for which Government grant is allowed
Group 1—Bed capacity, 1 to 25					
Stevenson Memorial Hospital	Alliston	431			431
Rosamond Memorial Hospital	Almonte	4,220	316	1,748	2,156
General Hospital	Bowmanville	3,595		2,502	1,093
Peel Memorial	Brampton	3,755	494		3,261
Public Hospital	Clinton	2,513		2,436	77
Haldimand County Memorial Hospital	Dunnville	6,072		2,136	3,936
General Hospital	Durham	2,809			2,809
General and Marine Hospital	Goderich	3,911	643	2,070	1,198
Memorial Hospital	Hanover	2,403			2,403
Notre Dame Hospital	Hawkesbury	3,007	33		2,974
St. Paul's Hospital	Hearst	2,070			2,070
Listowel Memorial Hospital	Listowel	3,416	308		3,108
Rosedale War Memorial Hospital	Matheson	1,322			1,322
Mount Forest General Hospital	Mount Forest	1,428			1,428
York County Hospital	Newmarket	4,225			4,225
Cottage Hospital	Niagara-on-the-Lake	1,148			1,148
Willett Hospital	Paris	4,901	563		4,338
General Hospital	Penetang	2,325		971	1,354
Victoria General Hospital	Renfrew	6,441		3,039	3,402
Seaforth Memorial Hospital	Seaforth	2,070	33		2,037
General Hospital	Sioux Lookout	3,560			3,560
Presbyterian Hospital	South Porcupine	1,807			1,807
Brebeuf Hospital	Sturgeon Falls	1,581			1,581
Soldiers' Memorial Hospital	Tillsonburg	4,774	258		4,516
General Hospital	Wingham	2,195		1,859	336
Total		75,979	2,648	16,761	56,570
Group 2—Bed capacity, 26 to 50					
Lady Minto Hospital	Chapleau	4,560		3,160	1,400
Cobalt Mines Hospital	Cobalt	5,946	505		5,441
General Hospital	Cobourg	3,789		1,321	2,468
Lady Minto Hospital	Cochrane	9,715	336	6,409	2,970
General and Marine Hospital	Collingwood	7,379	251	3,007	4,121
Royal Alexandra Hospital	Fergus	753			753
Alexandra Hospital	Ingersoll	2,978		1,747	1,231
Anson General Hospital	Iroquois Falls	3,650	37		3,613
General Hospital	Kenora	7,326	383	4,782	2,161
St. Joseph's Hospital	Kenora	5,440	62	2,646	2,732
General Hospital	Kincardine	2,769		2,158	611
Ross Memorial Hospital	Lindsay	9,888	575	5,699	3,614
Bethesda Hospital	London	4,209	55		4,154
St. Andrew's Hospital	Midland	7,951	88	4,547	3,316
Queen Victoria Hospital	North Bay	9,358	32	4,648	4,678
Lord Dufferin Hospital	Orangeville	4,888	366	2,439	2,083
Salvation Army Maternity Hospital	Ottawa	10,449	108		10,341
Stone Memorial Hospital	Parry Sound	5,459	130	1,394	3,935
St. Joseph's Hospital	Parry Sound	4,389	3	1,835	2,551
Cottage Hospital	Pembroke	10,487	64	6,770	3,653
Great War Memorial Hospital	Perth	7,842	213		7,629
C. E. Englehart Memorial Hospital	Petrolia	6,815	183	4,547	2,085
Prince Edward County Hospital	Picton	2,891			2,891
General Hospital	Port Arthur	12,539	198	7,301	5,040
General Hospital	Port Hope	4,813	27	2,097	2,689
Victoria General Hospital	Renfrew	6,441		3,039	3,402
Plummer Memorial Hospital	Sault Ste. Marie	5,889		3,914	1,975
Norfolk General Hospital	Simcoe	7,130	102		7,028
St. Francis' Hospital	Smith's Falls	8,701	1,020	3,668	4,003
General Hospital	Strathroy	7,047	140	5,064	1,843
Mount Sinai Hospital	Toronto	7,511	954		6,557
Orthopedic Hospital	"	9,609	619	5,624	3,366
General Hospital	Walkerton	4,282	235	1,923	2,124
Total		212,883	6,686	89,739	116,458

TABLE III.—Shows the proportion of pay patients to the total amount, and it will be noted that there is a wide variation of these between the different institutions. It also shows the number of days for which Government grant is allowed.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital	Location	Collective days' stay exclusive of infants under one year of age	Deduction for incurable and lying-in patients. (Refuge rate)	Deduction for pay patient days	No. of days for which Government grant is allowed
Group 3—Bed capacity, 51 to 100					
Royal Victoria Hospital	Barrie	11,508	1,419	6,115	3,974
General Hospital	Belleville	26,316	368	21,609	4,339
General Hospital	Brockville	16,926	980	11,257	4,689
St. Vincent De Paul	"	20,323	1,755	9,718	8,850
Public General Hospital	Chatham	16,811	641	8,120	8,050
St. Joseph's Hospital	"	14,433	296	9,615	4,522
Cornwall General Hospital	Cornwall	13,492	346	6,066	7,080
Hotel Dieu Hospital	"	20,013	421	3,727	15,865
General Hospital	Galt	16,016	155	8,835	7,026
St. Joseph's Hospital	Guelph	21,118	396	7,508	13,214
Kitchener-Waterloo Hospital	Kitchener	16,012	635	7,829	7,548
St. Mary's Hospital	"	14,373	314	.....	14,059
General Hospital	Mattawa	7,414	.....	1,235	6,179
Niagara Falls General Hospital	Niagara Falls	15,351	620	4,942	9,789
Orillia Soldiers' Memorial Hospital	Orillia	14,881	468	6,321	8,092
Oshawa General Hospital	Oshawa	19,934	147	13,507	6,280
Misericordia Maternity Hospital	Ottawa	2,820	.....	417	2,403
Ottawa Protestant Children's Hospital	"	7,128	824	.....	6,304
General and Marine Hospital	Owen Sound	14,604	507	8,515	5,582
Nicholls Hospital	Peterborough	21,320	1,297	13,381	6,642
St. Joseph's Hospital	"	16,761	699	5,438	10,624
General Hospital	St. Catharines	24,122	446	18,116	5,560
Memorial Hospital	St. Thomas	19,097	1,065	.....	18,032
General Hospital	Sarnia	13,641	25	9,205	4,411
Public Hospital	Smith's Falls	9,083	240	3,807	5,036
St. Mary's Hospital	Timmins	11,394	299	.....	11,095
St. John's Hospital	Toronto	15,318	342	8,817	6,159
Salvation Army Women's Hospital	"	14,913	14	1,201	13,698
Wellesley Hospital	"	29,072	.....	28,968	104
Women's College Hospital	"	14,391	96	8,790	5,505
Welland County Hospital	Welland	9,717	292	4,532	4,873
Woodstock Hospital	Woodstock	11,786	232	8,427	3,127
Total		500,088	15,339	246,018	238,731
Group 4—Bed capacity, 101 to 200					
Brantford General Hospital	Brantford	45,477	1,778	14,975	28,724
McKellar General Hospital	Fort William	37,492	1,432	17,432	18,628
Guelph General Hospital	Guelph	22,547	276	12,775	9,496
St. Joseph's Hospital	Hamilton	43,779	285	28,099	15,395
Hotel Dieu Hospital	Kingston	36,609	1,132	15,557	19,920
St. Joseph's Hospital	London	38,527	2,730	27,469	8,328
General Hospital	Pembroke	27,419	1,537	6,381	19,501
St. Joseph's Hospital	Port Arthur	29,404	628	10,549	18,227
General Hospital	Sault Ste. Marie	19,143	72	4,547	14,524
Stratford General Hospital	Stratford	19,989	745	11,541	7,703
St. Joseph's Hospital	Sudbury	26,957	272	11,781	14,904
St. Joseph's Hospital	Toronto	41,834	1,413	.....	40,421
Metropolitan General Hospital	Walkerville	8,731	24	.....	8,707
Salvation Army Grace Hospital	Windsor	28,978	1,077	.....	27,901
Hotel Dieu Hospital	"	36,448	408	20,208	15,832
Total		463,334	13,809	181,314	268,211
Group 5—Bed capacity, 200 and over					
General Hospital	Hamilton	143,175	6,378	39,008	97,789
Kingston General Hospital	Kingston	64,779	3,094	36,088	25,597
Victoria General Hospital	London	90,541	4,964	53,424	32,153
Ottawa Civic Hospital	Ottawa	138,937	8,444	4,893	125,600
General Hospital	"	65,676	990	32,354	32,332
General Hospital	Toronto	250,231	9,086	82,341	158,804
Hospital for Sick Children	"	86,885	8,244	5,667	72,974
St. Michael's Hospital	"	103,971	3,102	36,144	64,725
Western Hospital and Grace Hospital	"	137,317	4,518	56,555	76,244
Total		1,081,512	48,820	346,474	686,218
Grand Totals General Hospitals		**2,333,796**	**87,302**	**880,306**	**1,357,188**

TABLE IV.—This table deals with financial matters only, and shows the comparative income of the different institutions, as between amounts received from Municipalities, patients' maintenance, investments and donations. In the first item, Grant from Municipalities, it will be noted that there is great difference in the financial treatment accorded to Hospitals by the different Municipalities. This table should serve as a guide in reaching a more equitable basis in the outstanding cases.

GENERAL HOSPITALS—Continued

Name of Hospital	Location	Amount from municipalities as a grant and for patients' maintenance.	Amount from patients for board and treatment.	Amount as income from property or investments belonging to hospital.	Subscriptions and donations from private individuals and incidental receipts.	Total from all sources other than Government grant.
Group 1—Bed capacity, 1 to 25		$ c.	$ c.	$ c.	$ c.	$ c.
Stevenson Memorial Hospital	Alliston	908 45	1,863 64	.....	.....	2,772 09
Rosamond Memorial Hospital	Almonte	579 50	10,864 19	1,085 40	2,153 48	14,682 57
General Hospital	Bowmanville	1,750 00	12,859 21	221 41	107 19	14,937 81
Peel Memorial Hospital	Brampton	951 00	10,155 81	.....	951 71	12,058 52
Public Hospital	Clinton	750 00	8,749 57	.....	1,320 57	10,820 14
Haldimand County Memorial	Dunnville	2,075 25	12,664 07	.....	1,156 28	15,895 60
General Hospital	Durham	782 75	7,939 73	40 40	470 59	9,233 47
General and Marine	Goderich	1,631 00	8,543 00	400 00	2,300 00	12,874 00
Memorial Hospital	Hanover	1,100 00	7,367 15	.....	97 61	8,564 76
Notre Dame Hospital	Hawkesbury	1,842 25	4,205 90	.....	1,434 08	7,482 23
St. Paul's Hospital	Hearst	.....	4,211 47	.....	3,540 40	7,751 87
Listowel Memorial	Listowel	2,200 00	7,991 32	.....	880 38	11,071 70
Rosedale War Memorial	Matheson	.....	2,074 95	.....	3,793 97	5,868 92
Mount Forest General	Mount Forest	272 00	3,928 75	54 65	933 54	5,188 94
York County Hospital	Newmarket	5,475 00	10,607 32	22 95	1,739 50	17,844 77
Cottage Hospital	Niag-on-the-L.	1,645 00	2,355 03	.....	659 31	4,659 34
Willett Hospital	Paris	2,276 14	9,464 94	635 05	2,605 28	14,981 41
General Hospital	Penetang	2,303 00	5,149 69	.....	1,511 18	8,963 87
Seaforth Memorial Hospital	Seaforth	882 00	7,106 46	.....	.....	7,988 46
General Hospital	Sioux Lookout	.....	12,052 82	.....	3,070 89	15,123 71
Presbyterian Hospital	So. Porcupine	673 50	7,445 07	.....	153 61	8,272 18
Brebeuf Hospital	Sturgeon Falls	57 88	4,133 97	.....	148 60	4,340 45
Soldiers' Memorial Hospital	Tillsonburg	3,247 25	13,105 35	2,150 00	366 87	18,869 47
General Hospital	Wingham	1,150 00	8,482 74	.....	559 05	10,191 79
Total		32,551 97	183,322 15	4,609 86	29,954 09	250,438 07
Group 2—Bed capacity, 26 to 50		$ c.	$ c.	$ c.	$ c.	$ c.
Lady Minto Hospital	Chapleau	300 00	11,400 15	180 00	4,944 75	16,824 90
Cobalt Mines Hospital	Cobalt	5,247 75	10,409 73	110 00	8,344 40	24,111 88
General Hospital	Cobourg	1,609 00	10,347 94	.....	1,406 71	13,363 65
Lady Minto Hospital	Cochrane	500 00	10,192 88	298 37	6,756 50	17,747 75
General and Marine Hospital	Collingwood	3,384 60	18,756 59	620 82	1,251 51	24,013 52
Royal Alexandra Hospital	Fergus	421 50	14,809 73	.....	195 58	15,426 81
Alexandra Hospital	Ingersoll	1,800 00	8,987 60	731 04	753 20	12,271 84
Anson General Hospital	Iroquois Falls	242 25	10,756 80	.....	.....	10,999 05
General Hospital	Kenora	1,939 61	21,205 98	.....	306 92	23,452 51
St. Joseph's Hospital	Kenora	951 25	11,757 36	3,278 80	3,716 51	19,703 92
General Hospital	Kincardine	2,500 00	10,163 69	196 55	371 10	13,231 34
Ross Memorial Hospital	Lindsay	1,700 00	31,404 36	1,400 00	137 93	34,642 29
Bethesda Hospital	London	4,535 00	10,718 74	.....	5,452 70	20,706 44
St. Andrew's Hospital	Midland	5,657 89	21,563 44	.....	821 76	28,043 09
Queen Victoria Hospital	North Bay	3,662 25	28,291 81	.....	142 65	32,096 71
Lord Dufferin Hospital	Orangeville	2,845 65	14,346 60	.....	530 11	17,722 36
Salvation Army Maternity Hospital	Ottawa	1,513 25	22,253 16	.....	4,926 95	28,693 36
Stone Memorial Hospital	Parry Sound	.....	11,323 34	.....	4,395 04	15,718 38
St. Joseph's Hospital	" "	315 00	8,694 60	.....	425 30	9,434 90
Cottage Hospital	Pembroke	3,000 00	30,585 67	1,189 20	2,827 61	37,602 48
Great War Memorial Hospital	Perth	1,317 32	24,627 80	84 71	3,362 91	29,392 74
C. E. Englehart Memorial Hospital	Petrolia	3,000 00	20,143 82	3,050 00	2,805 36	28,999 18
Prince Edward County Hospital	Picton	2,844 15	10,621 05	359 57	1,491 51	15,316 28
General Hospital	Port Arthur	6,085 44	32,563 50	.....	2,179 34	40,828 28
General Hospital	Port Hope	1,734 00	13,905 67	1,180 23	589 10	17,409 00
Victoria General	Renfrew	3,988 50	18,075 89	.....	1,503 12	23,567 51
Plummer Memorial Hospital	Sault Ste. Marie	280 00	20,192 31	.....	459 50	20,931 81
Norfolk General Hospital	Simcoe	4,747 88	22,639 15	1,083 51	3,207 88	31,678 42
St. Francis' Hospital	Smith's Falls	1,100 00	16,824 30	.....	3,870 13	21,794 43
General Hospital	Strathroy	4,062 00	22,055 41	74 80	.....	26,192 21
Mount Sinai Hospital	Toronto	2,099 25	16,504 92	.....	8,580 99	27,185 16
Orthopedic Hospital	"	4,570 42	33,234 24	2,325 99	13,667 01	53,797 66
General Hospital	Walkerton	2,875 00	11,803 02	475 47	2,594 33	17,747 82
Total		80,828 96	581,161 25	16,639 06	92,018 41	770,647 68

TABLE IV.—This table deals with financial matters only, and shows the comparative income of the different institutions, as between amounts received from Municipalities, patients' maintenance, investments and donations. In the first item, Grants from Municipalities, it will be noted that there is great difference in the financial treatment accorded to Hospitals by the different Municipalities. This table should serve as a guide in reaching a more equitable basis in the outstanding cases.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital	Location	Amount from municipalities as a grant and for patients' maintenance.	Amount from patients for board and treatment.	Amount as income from property or investments belonging to hospital	Subscriptions and donations from private individuals and incidental receipts.	Total from all sources other than Government grant.
Group 3—Bed capacity, 51 to 100		$ c.	$ c.	$ c.	$ c.	$ c.
Royal Victoria Hospital	Barrie	7,719 50	25,136 38	478 50	914 93	34,249 31
General Hospital	Belleville	21,881 75	78,514 03	.....	428 37	100,824 15
General Hospital	Brockville	2,750 00	56,088 43	1,463 64	844 45	61,146 52
St. Vincent de Paul Hospital	"	3,982 25	42,176 48	38 00	8,001 87	54,198 60
Public General Hospital	Chatham	11,878 36	50,520 00	24 68	.....	62,423 04
St. Joseph's Hospital	"	1,569 58	49,162 44	.....	6,569 21	57,301 23
Cornwall General Hospital	Cornwall	5,378 00	31,675 71	1,029 83	9,843 77	47,927 31
Hotel Dieu Hospital	"	8,607 00	30,534 60	505 00	19,982 30	59,628 90
General Hospital	Galt	9,700 00	43,987 50	.....	3,412 10	57,099 60
St. Joseph's Hospital	Guelph	6,310 60	57,691 46	.....	21,104 35	85,106 41
Kitchener-Waterloo Hospital	Kitchener	21,471 31	48,345 67	642 56	937 14	71,396 68
St. Mary's Hospital	"	10,327 76	37,633 06	.....	18,480 71	66,441 53
General Hospital	Mattawa	100 00	8,740 13	.....	3,539 20	12,379 33
Niagara Falls General Hospital	Niagara Falls	7,810 00	51,476 09	612 50	3,184 05	63,082 64
Orillia Soldiers Memorial Hospital	Orillia	2,848 34	41,145 28	.....	481 30	44,474 92
Oshawa General Hospital	Oshawa	3,851 25	70,578 62	26 26	1,296 85	75,752 98
Misericordia Maternity Hospital	Ottawa	2,259 30	36,034 21	78 14	15,332 89	53,704 54
Ottawa Protestant Children's Hospital	"	8,215 25	8,263 17	.....	1,202 61	17,681 03
General and Marine Hospital	Owen Sound	3,588 03	35,248 53	.....	5,621 00	44,457 56
Nicholls Hospital	Peterborough	5,571 37	57,780 43	12,457 86	971 08	76,780 74
St. Joseph's Hospital	"	3,581 85	38,603 73	.....	.....	42,185 58
*General Hospital	St. Catharines	17,039 50	70,288 60	4,260 90	8,506 76	100,095 76
Memorial Hospital	St. Thomas	13,000 00	72,390 05	914 36	299 32	86,603 73
General Hospital	Sarnia	4,800 00	41,236 27	2,910 06	425 00	49,371 33
Public Hospital	Smiths Falls	2,249 00	27,859 67	2,250 15	4,951 36	37,310 18
St. Mary's Hospital	Timmins	622 50	39,449 19	362 62	11,286 07	51,720 38
St. John's Hospital	Toronto	1,847 00	67,866 73	78 73	9,423 01	79,215 47
Salvation Army Women's Hospital	"	400 00	41,295 51	.....	6,568 75	48,264 26
Wellesley Hospital	"	120 00	212,884 13	.....	.....	213,004 13
Women's College Hospital	"	7,983 08	50,732 26	.....	200 00	58,915 34
Welland County Hospital	Welland	3,000 00	30,179 98	.....	991 45	34,171 43
Woodstock Hospital	Woodstock	5,000 00	40,692 42	1,516 31	2,276 85	49,485 58
Total		205,462 58	1,594,210 76	29,650 10	167,076 75	1,996,400 19
Group 4—Bed capacity 101 to 200		$ c.	$ c.	$ c.	$ c.	$ c.
Brantford General Hospital	Brantford	43,305 45	90,691 71	180 00	7,711 96	141,889 12
McKellar General Hospital	Fort William	22,867 57	100,041 54	100 00	2,279 43	125,288 54
Guelph General Hospital	Guelph	13,604 45	65,846 45	.....	964 03	80,414 93
St. Joseph's Hospital	Hamilton	5,356 75	140,380 65	.....	918 29	146,655 69
Hotel Dieu Hospital	Kingston	11,209 00	65,475 25	.....	41,025 00	117,709 25
St. Joseph's Hospital	London	5,798 75	113,278 26	.....	31,394 93	150,471 94
General Hospital	Pembroke	4,772 98	39,081 46	1,612 00	16,718 92	62,185 36
St. Joseph's Hospital	Port Arthur	4,789 78	65,045 58	476 00	5,283 08	75,594 44
General Hospital	Sault Ste. Marie	1,938 30	39,601 52	.....	1,100 00	42,639 82
Stratford General Hospital	Stratford	13,230 00	62,178 52	123 93	1,408 59	76,941 04
St. Joseph's Hospital	Sudbury	2,552 00	58,561 00	.....	34,419 44	95,532 44
St. Joseph's Hospital	Toronto	23,480 36	98,633 29	136 85	.....	122,250 50
Metropolitan General Hospital	Walkerville	4,488 61	33,456 41	.....	3,641 54	41,586 56
Salvation Army Grace Hospital	Windsor	8,733 00	90,456 05	.....	18,210 89	117,399 94
Hotel Dieu Hospital	"	16,856 55	52,694 00	.....	58,131 84	127,682 39
Total		182,983 55	1,115,421 69	2,628 78	223,207 94	1,524,241 96
Group 5—Bed capacity, 200 and over		$ c.	$ c.	$ c.	$ c.	$ c.
General Hospital	Hamilton	188,544 88	265,904 08	96 75	.....	454,545 71
Kingston General Hospital	Kingston	51,275 50	142,795 38	12,253 77	9,792 52	216,117 17
Victoria General Hospital	London	175,434 39	209,784 82	3,339 75	4,863 25	393,422 21
Ottawa Civic Hospital	Ottawa	85,211 55	404,747 50	2,353 67	487 50	492,800 22
General Hospital	"	27,089 91	156,100 74	1,733 38	6,602 12	191,526 15
General Hospital	Toronto	157,428 50	788,718 92	65,580 00	25,724 09	1,037,451 51
Hospital for Sick Children	"	118,786 48	92,544 61	38,913 61	87,699 84	337,944 54
St. Michael's Hospital	"	77,452 11	262,721 87	.....	1,880 65	342,054 63
Western Hospital and Grace Hospital	"	70,084 95	426,219 98	3,201 76	11,830 07	511,336 76
Total		951,308 27	2,749,537 90	127,472 69	148,880 04	3,977,198 90
Grand Totals, General Hospitals		**1,453,135.33**	**6,223,653.75**	**181,000.49**	**661,137.23**	**8,518,926.80**

*Campaign fund assets as of date September 30, 1928, $56,259.11.

TABLE V.—Shows the compilation of the Government Grant. The days' stay upon which these grants are based is taken from the Statistical return furnished by the Institutions and corrected in accordance with the monthly admission, discharge and death sheets as furnished by the Institutions.

GENERAL HOSPITALS—Continued

Name of Hospital	Location.	Collective days' stay for grant at 50c. per day.	Collective days' stay for grant at 60c. per day.	Amount of Government grant for proper hospital cases	Collective days' say at refuge rate (10c.)	Amount at refuge rate.	Days stay at indigent rate ($2.00)	Amount at indigent rate.	Total payable as Government grant.
Group 1—Bed capacity, 1 to 25									
				$ c.		$ c.		$ c.	$ c.
Stevenson Mem. Hospital	Ailiston	.....	431	258 60	.....	.....	.....	.....	258 60
Rosamond Mem. Hospital	Almonte	1,197	959	1,173 90	316	31 60	.....	.....	1,205 50
General Hospital	Bowmanville	605	488	595 30	.....	.....	.....	.....	595 30
Peel Memorial Hospital	Brampton	2,082	1,179	1,748 40	494	49 40	.....	.....	1,797 80
Public Hospital	Clinton	77	.....	38 50	.....	.....	.....	.....	38 50
Haldimand Co. Mem. Hos	Dunnville	1,956	1,980	2,166 00	.....	.....	.....	.....	2,166 00
General Hospital	Durham	1,250	1,476	1,510 60	213	21 30	.....	.....	1,531 90
General and Marine Hospital	Goderich	755	443	643 30	643	64 30	.....	.....	707 60
Memorial Hospital	Hanover	1,029	1,374	1,338 90	.....	.....	.....	.....	1,338 90
Notre Dame Hospital	Hawkesbury	1,506	1,468	1,633 80	33	3 30	.....	.....	1,637 10
St. Paul's Hospital	Hearst	1,070	1,000	1,135 00	.....	.....	2 44	488 00	1,623 00
Listowel Memorial Hospital	Listowel	1,325	1,783	1,732 30	308	30 80	.....	.....	1,763 10
Rosedale War Mem. Hospital	Matheson	569	632	663 70	.....	.....	121	242 00	905 70
Mount Forest General Hos	Mount Forest	572	856	799 60	.....	.....	.....	.....	799 60
York County Hospital	Newmarket	2,166	2,059	2,318 40	.....	.....	.....	.....	2,318 40
Cottage Hospital	Niag.-on-the-L	647	501	624 10	.....	.....	.....	.....	624 10
Willett Hospital	Paris	2,263	2,075	2,376 50	5 63	56 30	.....	.....	2,432 80
General Hospital	Penetang	622	732	750 20	.....	.....	.....	.....	750 20
Seaforth Memorial Hospital	Seaforth	924	1,113	1,129 80	33	3 30	.....	.....	1,133 10
General Hospital	Sioux Lookout	1,877	1,683	1,948 30	.....	.....	94	188 00	2,136 30
Presbyterian Hospital	South Porcupine	936	871	990 60	.....	.....	.....	.....	990 60
Brebeuf Hospital	Sturgeon Falls	846	735	864 00	.....	.....	.....	.....	864 00
Soldiers' Memorial Hospital	Tillsonburg	2,429	2,087	2,446 70	258	25 80	.....	.....	2,492 50
General Hospital	Wingham	128	208	188 80	.....	.....	.....	.....	188 80
Total		26,831	26,133	29,095 30	2,861	286 10	459	918 00	30,299 40
Group 2—Bed capacity, 26 to 50									
				$ c.		$ c.		$ c.	$ c.
Lady Minto Hospital	Chapleau	798	602	760 20	.....	.....	.....	.....	760 20
Cobalt Mines Hospital	Cobalt	3,090	1,984	2,735 40	505	50 50	367	734 00	3,519 90
General Hospital	Cobourg	1,486	982	1,332 20	.....	.....	.....	.....	1,332 20
Lady Minto Hospital	Cochrane	1,896	1,074	1,592 40	336	33 60	.....	.....	1,626 00
General and Marine Hospital	Collingwood	2,519	1,602	2,220 70	251	25 10	.....	.....	2,245 80
Royal Alexandra Hospital	Fergus	320	433	419 80	.....	.....	.....	.....	419 80
Alexandra Hospital	Ingersoll	742	499	670 40	.....	.....	.....	.....	670 40
Anson General Hospital	Iroquois Falls	2,182	1,420	1,943 00	37	3 70	11	22 00	1,968 70
General Hospital	Kenora	1,238	823	1,112 80	383	38 30	.....	.....	1,151 10
St. Joseph's Hospital	Kenora	1,833	889	1,449 90	62	6 20	.....	.....	1,456 10
General Hospital	Kincardine	314	297	335 20	.....	.....	.....	.....	335 20
Ross Memorial Hospital	Lindsay	2,242	1,414	1,969 40	575	57 50	.....	.....	2,026 90
Bethesda Hospital	London	2,302	1,852	2,262 20	55	5 50	.....	.....	2,267 70
St. Andrew's Hospital	Midland	1,830	1,485	1,806 00	88	8 80	.....	.....	1,814 80
Queen Victoria Hospital	North Bay	2,605	2,073	2,546 30	32	3 20	.....	.....	2,549 50
Lord Dufferin Hospital	Orangeville	1,276	807	1,122 20	366	36 60	.....	.....	1,158 80
Salvation Army Mat. Hos	Ottawa	5,548	4,793	5,649 80	108	10 80	.....	.....	5,660 60
Stone Memorial Hospital	Parry Sound	1,708	1,023	1,467 80	130	13 00	904	1,808 00	3,288 80
St. Joseph's Hospital	Parry Sound	1,348	1,203	1,395 80	3	30	.....	.....	1,396 10
Cottage Hospital	Pembroke	2,271	1,382	1,964 70	64	6 40	.....	.....	1,971 10
Great War Memorial Hospital	Perth	4,186	3,443	4,158 80	213	21 30	.....	.....	4,180 10
C. E. Englehart Mem. Hos	Petrolia	1,329	756	1,118 10	183	18 30	.....	.....	1,136 40
Prince Edward Co. Hospital	Picton	1,483	1,408	1,586 30	.....	.....	.....	.....	1,586 30
General Hospital	Port Arthur	2,835	2,205	2,740 50	198	19 80	.....	.....	2,760 30
General Hospital	Port Hope	1,431	1,258	1,470 30	27	2 70	.....	.....	1,473 00
Victoria General Hospital	Renfrew	2,120	1,282	1,829 20	.....	.....	.....	.....	1,829 20
Plummer Memorial Hospital	Sault Ste. Marie	1,375	316	877 10	.....	.....	294	588 00	1,465 10
Norfolk General Hospital	Simcoe	4,125	3,903	4,404 30	102	10 20	.....	.....	4,414 50
St. Francis' Hospital	Smith's Falls	2,678	1,325	2,134 00	1,020	102 00	.....	.....	2,236 00
General Hospital	Strathroy	1,054	789	1,000 40	140	14 00	.....	.....	1,014 40
Mount Sinai Hospital	Toronto	3,569	2,988	3,577 30	954	95 40	.....	.....	3,672 70
Orthopedic Hospital	"	2,079	1,074	1,683 90	619	61 90	.....	.....	1,745 80
General Hospital	Walkerton	1,327	797	1,141 70	235	23 50	.....	.....	1,165 20
Total		67,139	48,181	62,478 10	6,686	668 60	1576	3,152 00	66,298 70

TABLE V.—Shows the compilation of the Government Grant. The days' stay upon which these grants are based is taken from the Statistical return furnished by the Institutions and corrected in accordance with the monthly admission, discharge and death sheets as furnished by the Institutions.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Collective days' stay for grant at 50c. per day.	Collective days' stay for grant at 60c. per day.	Amount of Government grant for proper hospital cases	Collective days' stay at refuge rate (10c.)	Amount at refuge rate.	Days' stay at indigent rate ($2.00)	Amount at indigent rate.	Total payable as Government grant.
Group 3—Bed capacity, 51 to 100									
				$ c.		$ c.		$ c.	$ c.
Royal Victoria Hospital	Barrie	2,278	1,696	2,156 60	1,419	141 90			2,298 50
General Hospital	Belleville	3,268	1,071	2,276 60	368	36 80			2,313 40
General Hospital	Brockville	2,810	1,879	2,532 40	980	98 00			2,630 40
St. Vincent de Paul Hospital	"	5,383	3,467	4,771 70	1,755	175 50			4,947 20
Public General Hospital	Chatham	4,249	3,801	4,405 10	641	64 10			4,469 20
St. Joseph's Hospital	"	2,173	2,349	2,495 90	296	29 60			2,525 50
Cornwall General Hospital	Cornwall	3,682	3,398	3,879 80	346	34 60			3,914 40
Hotel Dieu Hospital	"	8,921	6,944	8,626 90	421	42 10			8,669 00
General Hospital	Galt	3,824	3,202	3,833 20	155	15 50			3,848 70
St. Joseph's Hospital	Guelph	7,380	5,834	7,190 40	396	39 60			7,230 00
Kitchener-Waterloo Hospital	Kitchener	4,607	2,790	3,977 50	635	63 50			4 041 00
St. Mary's Hospital	"	7,762	6,387	7,713 20	314	31 40			7,744 60
General Hospital	Mattawa	2,956	2,531	2,996 60			692	1,384 00	4 380 60
Niagara Falls General Hos.	Niagara Falls	5,478	4,311	5,325 60	620	62 00			5 387 60
Orillia Soldiers' Mem. Hos.	Orillia	4,359	3,733	4 419 30	468	46 80			4,456 10
Oshawa General Hospital	Oshawa	3,792	2,488	3,388 80	147	14 70			3,403 50
Misericordia Maternity Hos.	Ottawa	1,405	998	1,301 30					1,301 30
Ottawa Protestant Chil. Hos.	"	4,129	2,175	3,369 50	824	82 40			3 451 90
General and Marine Hospital	Owen Sound	2,753	2,829	3,073 90	507	50 70			3,124 60
Nicholls Hospital	Peterborough	3,778	2,864	3,607 40	1,297	129 70			3,737 10
St. Joseph's Hospital	"	6,142	4,482	5,760 20	699	69 90			5,830 10
General Hospital	St. Catharines	3,087	2,473	3,027 30	446	44 60			3,071 90
Memorial Hospital	St. Thomas	9,598	8,434	9,859 40	1,065	106 50			9,965 90
General Hospital	Sarnia	2,218	2,193	2,424 80	25	2 50			2,427 30
Public Hospital	Smith's Falls	3,336	1,700	2,688 00	240	24 00			2,712 00
St. Mary's Hospital	Timmins	5,562	5,533	6,100 80	299	29 90			6,130 70
St. John's Hospital	Toronto	3,293	2,866	3,366 10	342	34 20			3,400 30
Salvation Army Women's Ho.	"	7,859	5,839	7,432 90	14	1 40			7,434 30
Wellesley Hospital	"		104	62 40					62 40
Women's College Hospital	"	2,779	2,726	3,025 10	96	9 60			3,034 70
Welland County Hospital	Welland	2,209	1,748	2,153 30	292	29 20			2,182 50
Woodstock Hospital	Woodstock	1,625	1,502	1,713 70	232	23 20			1,736 90
Total		132,695	104,347	128,955 70	15,339	1,533 90	692	1,384 00	131,873 60
Group 4—Bed capacity, 101 to 200									
				$ c.		$ c.		$ c.	$ c.
Brantford General Hospital	Brantford	15,612	13,112	15,673 20	1,778	177 80			15,851 00
McKellar General Hospital	Fort William	10,830	7,690	10,029 00	1,432	143 20	692	1,384 00	11,556 20
Guelph General Hospital	Guelph	5,829	3,667	5,114 70	276	27 60			5,142 30
St. Joseph's Hospital	Hamilton	9,369	6,026	8,300 10	285	28 50			8,328 60
Hotel Dieu Hospital	Kingston	11,661	9,259	11,385 90	1,132	113 20			11,499 10
St. Joseph's Hospital	London	5,478	2,850	4,449 00	2,730	273 00			4,722 00
General Hospital	Pembroke	11,090	8,511	10,651 60	1,537	153 70			10,805 30
St. Joseph's Hospital	Port Arthur	9,860	7,748	9,578 80	628	62 80	619	1,238 00	10,879 60
General Hospital	Sault Ste. Marie	8,347	6,177	7,879 70	72	7 20			7,886 90
Stratford General Hospital	Stratford	4,244	3,459	4,197 40	745	74 50			4,271 90
St. Joseph's Hospital	Sudbury	7,174	7,730	8,225 00	272	27 20			8,252 20
St. Joseph's Hospital	Toronto	22,958	17,375	21,904 00	1,413	141 30	78	156 00	22,201 30
Metropolitan General Hos.	Walkerville	320	8,387	5,192 20	24	2 40			5,194 60
Salvation Army Grace Hos.	Windsor	16,369	11,532	15,103 70	1,077	107 70			15,211 40
Hotel Dieu Hospital	"	8,548	7,284	8,644 40	408	40 80			8,685 20
Total		147,689	120,807	146,328 70	13,809	1,380 90	1389	2,778 00	150,487 60
Group 5—Bed capacity, 200 and over									
				$ c.		$ c.		$ c.	$ c.
General Hospital	Hamilton	57,952	39,837	52,878 20	6,378	637 80			53,516 00
Kingston General Hospital	Kingston	14,841	10,756	13,874 10	3,094	309 40			14,183 50
Victoria General Hospital	London	20,078	12,075	17,284 00	4,964	496 40			17,780 40
Ottawa Civic Hospital	Ottawa	71,136	54,464	68,246 40	8,444	844 40			69,090 80
General Hospital	"	18,946	13,386	17,504 60	990	99 00			17,603 60
General Hospital	Toronto	90,650	67,042	85,550 20	9,086	908 60	1112	2,224 00	88,682 80
Hospital for Sick Children	"	40,649	32,325	39,719 50	8,244	824 40			40,543 90
St. Michael's Hospital	"	35,191	29,534	35,315 90	3,102	310 20			35,626 10
Western and Grace Hospitals.	"	44,367	31,877	41,309 70	4,518	451 80			41,761 50
Total		393,810	291,296	371,682 60	48,820	4,882 00	1112	2,224 00	378,788 60
Grand Total, Gen. Hospitals		**268,164**	**590,764**	**738,540.40**	**87,515**	**8,751.50**	**5228**	**10,456.00**	**757,747.90**

TABLE VI.—This is a very important table showing the comparison of costs, under the headings "Average cost per patient per day," and "Dietary" and "Salary cost per patient per day." Under all three headings there is quite a variation, and it would appear that a careful study of these, with a view of bringing the more outstanding ones into line, would be profitable in the cases of the Hospitals affected.

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Collective days' stay, exclusive of infants.	Cost of dietaries.	Salaries, fuel, light, medicine, bedding, and all other maintenance expenditure.	Total expenditure for maintenance.	Average cost of each adult patient per day.	Average dietary cost per day.	Average salaries cost per patient per day.
Group 1—Bed capacity, 1 to 25			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
*Stevenson Memorial Hos.	Alliston	431	529 78	3,558 82	4,098 60	9 51	1 23	5 34
Rosamond Memorial Hos.	Almonte	4,220	2,489 30	11,398 55	13,887 85	3 29	59	1 45
General Hospital	Bowmanville	3,595	3,533 93	12,265 52	15,799 45	4 39	98	1 87
Peel Memorial	Brampton	3,755	2,414 81	10,168 05	12,582 86	3 35	64	1 84
Public Hospital	Clinton	2,513	2,230 95	7,773 98	10,004 93	3 98	88	1 08
Haldimand Co. Mem. Hos.	Dunnville	6,072	2,381 64	13,909 25	16,290 89	2 68	39	1 26
General Hospital	Durham	2,809	1,471 14	5,150 50	6,621 64	2 35	52	1 05
General and Marine Hos.	Goderich	3,911	3,282 00	10,149 00	13,431 00	3 43	84	1 28
Memorial Hospital	Hanover	2,403	1,914 50	8,045 14	9,959 64	4 14	79	2 22
Notre Dame Hospital	Hawkesbury	3,007	2,202 60	13,507 76	15,710 36	5 22	73	1 76
St. Paul's Hospital	Hearst	2,070	1,895 81	7,101 16	8,996 97	4 35	91	2 64
Listowel Memorial Hospital	Listowel	3,416	2,696 93	8,567 82	11,264 75	3 29	79	1 61
Rosedale War Mem. Hos.	Matheson	1,322	1,280 06	5,538 20	6,818 26	5 16	98	2 27
Mount Forest General Hos.	Mount Forest	1,428	771 20	5,036 63	5,807 83	4 07	54	2 26
York County Hospital	Newmarket	4,225	2,920 46	13,158 06	16,078 52	3 81	69	1 28
Cottage Hospital	Nia-on-Lake	1,148	1,132 09	4,042 27	5,174 36	4 51	99	2 48
Willett Hospital	Paris	4,901	2,875 39	14,834 80	17,710 19	3 61	59	2 10
General Hospital	Penetang	2,325	1,368 80	5,776 50	7,145 30	3 07	59	1 32
Seaforth Memorial Hos.	Seaforth	2,070	2,494 29	6,745 26	9,239 55	4 46	1 20	1 00
General Hospital	Sioux Lookout	3,560	4,031 68	9,656 09	13,687 77	3 84	1 13	1 62
Presbyterian Hospital	So. Porcupine	2,193	3,168 95	10,791 40	13,960 35	6 36	1 44	2 84
Brebeuf Hospital	Sturgeon Falls	1,581	1,204 62	4,596 14	5,800 76	3 67	76	1 17
Soldiers' Memorial Hospital	Tillsonburg	4,774	3,255 03	13,351 47	16,606 50	3 48	68	1 53
General Hospital	Wingham	2,195	2,738 27	7,703 20	10,441 47	4 76	1 25	1 75
Total		69,924	54,284 23	212,825 57	267,109 80	3 82	78	1 91
Geoup 2—Bed capacity, 26 to 50			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Lady Minto Hospital	Chapleau	4,560	2,292 12	11,022 47	13,314 59	2 92	50	1 57
Cobalt Mines Hospital	Cobalt	5,946	5,276 18	19,893 04	25,169 22	4 23	89	1 97
General Hospital	Cobourg	3,789	2,992 80	12,165 64	15,158 44	4 00	79	1 79
Lady Minto Hospital	Cochrane	9,715	5,621 84	16,127 82	21,749 66	2 24	58	73
General and Marine Hos.	Collingwood	7,379	8,264 54	20,323 65	28,588 19	3 87	1 12	1 30
Royal Alexandra Hospital	Fergus	3,796	3,478 98	12,129 29	15,608 27	4 11	92	1 05
Alexandra Hospital	Ingersoll	2,988	2,549 26	10,187 78	12,737 04	4 26	85	1 31
Anson General	Iroquois Falls	3,650	5,087 81	25,384 17	30,471 98	8 35	1 39	3 75
General Hospital	Kenora	7,326	5,683 94	14,677 00	20,360 94	2 78	78	1 17
St. Joseph's Hos.	"	5,440	5,416 61	16,331 39	21,748 00	3 99	99	1 15
General Hospital	Kincardine	2,769	2,871 82	9,121 17	11,992 99	4 33	1 04	1 49
Ross Memorial	Lindsay	9,888	8,320 64	26,827 11	35,147 75	3 56	84	95
Bethesda Hospital	London	4,209	5,150 70	9,038 03	14,188 73	3 37	1 22	1 56
St. Andrew's Hospital	Midland	7,951	4,298 88	17,948 81	22,247 69	2 79	54	94
Queen Victoria Hospital	North Bay	9,358	7,799 66	26,021 70	33,821 36	3 61	83	1 15
Lord Dufferin Hospital	Orangeville	4,888	4,966 60	14,795 46	19,762 06	4 05	1 02	1 22
S.A. Maternity Hospital	Ottawa	10,449	9,202 45	23,255 76	32,458 21	3 11	88	1 04
Stone Memorial Hospital	Parry Sound	5,459	3,490 80	9,671 48	13,162 28	2 41	64	1 09
St. Joseph's Hospital	" "	4,389	2,908 71	9,540 10	12,448 81	2 83	66	56
Cottage Hospital	Pembroke	10,487	9,766 60	25,787 49	35,554 09	3 39	93	1 07
Great War Memorial Hos.	Perth	7,842	8,612 74	18,488 21	27,100 95	3 45	1 09	1 16
C. E. Englehart Mem. Hos.	Petrolia	6,815	4,425 74	20,743 05	25,168 79	3 69	65	1 17
Prince Edward County Hos.	Picton	2,700	2,612 53	9,534 94	12,147 47	4 49	97	1 66
General Hospital	Port Arthur	12,539	9,925 62	28,514 54	38,440 16	3 06	79	1 07
General Hospital	Port Hope	4,813	3,071 59	12,566 13	15,637 72	3 25	64	1 58
Victoria General Hospital	Renfrew	6,441	4,007 91	16,590 18	20,598 09	3 19	62	1 21
Plummer Memorial Hospital	Sault Ste. Marie	5,889	5,326 33	15,533 72	20,860 05	3 54	90	1 47
Norfolk General Hospital	Simcoe	7,130	6,508 51	22,788 81	29,297 32	4 11	91	2 01
St. Francis' Hospital	Smith's Falls	8,701	9,261 32	12,079 67	21,340 99	2 45	1 06	27
General Hospital	Strathroy	7,047	6,742 48	17,139 07	23,881 55	3 39	96	1 05
Mount Sinai Hospital	Toronto	7,511	6,683 70	21,018 08	27,701 78	3 69	89	1 87
Orthopedic Hospital	"	9,609	8,548 79	33,065 44	41,614 23	4 33	89	1 52
General Hospital	Walkerton	4,282	2,811 91	12,054 67	14,866 58	3 47	66	1 19
Total		2157.55	183,980 11	570,365 87	754,345 98	3 49	85	1 34

*Opened June 27th, 1928.

TABLE VI.—This is a very important table showing the comparison of costs, under the headings "Average cost per patient per day," and "Dietary" and "Salary cost per patient per day." Under all three headings there is quite a variation, and it would appear that a careful study of these, with a view of bringing the more outstanding ones into line, would be profitable in the cases of the Hospitals affected.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	Collective days' stay, exclusive of infants.	Cost of dietaries.	Salaries, fuel, light, medicine, bedding, and all other maintenance expenditure.	Total expenditure for maintenance.	Average cost of each adult patient per day.	Average dietary cost per day.	Average salaries cost per patient per day.
Group 3—Bed capacity, 51 to 100			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Royal Victoria Hospital	Barrie	11,508	11,321 95	23,282 07	34,604 02	2 02	98	81
General Hospital	Belleville	26,316	21,731 62	66,292 24	88,023 86	2 52	93	99
General Hospital	Brockville	16,926	17,965 19	39,670 85	57,636 04	2 34	1 06	89
St. Vincent de Paul Hospital	"	20,323	22,078 16	36,399 39	58,477 55	1 79	1 09	25
Public General Hospital	Chatham	16,811	17,427 70	43,000 50	60,428 20	2 56	1 04	1 24
St. Joseph's Hospital	"	14,433	12,850 46	33,104 07	45,954 53	2 29	89	57
Cornwall General	Cornwall	13,492	11,931 11	35,670 02	47,601 13	2 64	88	98
Hotel Dieu Hospital	"	20,013	13,917 86	52,763 54	66,681 40	2 63	70	1 32
General Hospital	Galt	16,016	15,565 87	47,867 81	63,433 68	2 99	97	1 18
St. Joseph's Hospital	Guelph	21,118	22,612 12	50,921 82	73,533 94	2 41	1 07	52
Kitchener-Waterloo Hospital	Kitchener	16,012	14,149 52	50,070 21	64,219 73	3 13	88	1 20
St. Mary's Hospital	"	14,373	11,537 85	13,726 70	25,264 55	98	80	65
General Hospital	Mattawa	7,414	3,723 99	30,998 17	34,722 16	4 18	50	2 04
Niagara Falls General Hos	Niagara Falls	15,351	16,551 72	39,732 30	56,284 02	2 59	1 08	1 23
Orillia Soldiers' Mem. Hos	Orillia	14,881	10,903 63	30,972 31	41,875 94	2 08	73	78
Oshawa General Hospital	Oshawa	19,934	14,848 29	49,373 94	64,222 23	2 48	74	98
Misericordia Maternity Hos	Ottawa	3,367	8,015 87	32,500 92	40,516 79	1203	2 38	1 35
Ottawa Protestant Children's Hospital	"	7,128	2,037 93	19,023 07	21,061 00	2 67	29	91
General and Marine Hospital	Owen Sound	14,604	12,590 66	28,723 78	41,314 44	1 97	86	84
Nicholls Hospital	Peterborough	21,320	21,991 59	52,919 89	74,911 48	2 48	1 03	1 20
St. Joseph's Hospital	"	16,761	11,355 98	29,019 70	40,375 68	1 73	68	56
General Hospital	St. Catharines	24,122	30,989 01	79,130 18	110,119 19	3 28	1 28	1 61
Memorial Hospital	St. Thomas	19,097	19,504 65	69,664 41	89,169 06	3 65	1 02	1 20
General Hospital	Sarnia	13,641	15,688 39	38,775 17	54,463 56	2 84	1 15	1 09
Public Hospital	Smith's Falls	9,083	8,098 84	29,547 23	37,646 07	3 25	89	1 31
St. Mary's Hospital	Timmins	11,394	14,122 08	36,531 54	50,653 62	3 21	1 24	1 99
St. John's Hospital	Toronto	15,318	25,113 27	67,812 95	92,926 22	4 42	1 63	2 21
S.A. Army Women's Hos	"	14,913	13,379 99	42,278 67	55,658 66	2 84	90	1 46
Wellesley Hospital	"	29,072	63,475 81	129,776 05	193,251 86	6 64	2 18	1 95
Women's College Hospital	"	14,391	16,391 71	55,189 59	71,581 30	3 83	1 14	1 92
Welland County Hospital	Welland	9,717	8,655 17	29,379 04	38,034 21	3 02	89	1 12
Woodstock Hospital	Woodstock	11,786	11,481 65	37,244 74	48,726 39	3 17	97	1 84
Total		500,635	532,009 64	1,421,362 87	1,943,372 51	3 88	1 60	1 19
Group 4—Bed capacity 101 to 200			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Brantford General Hospital	Brantford	45,477	32,457 90	126,616 44	159,074 34	2 78	71	1 36
McKellar General Hospital	Fort William	37,492	27,418 97	103,729 10	131,148 07	2 77	73	1 33
Guelph General Hospital	Guelph	22,547	21,353 49	60,404 95	81,758 44	2 68	95	1 19
St. Joseph's Hospital	Hamilton	43,779	42,930 17	95,569 80	138,499 97	2 18	99	73
Hotel Dieu Hospital	Kingston	36,609	35,703 73	97,227 03	132,930 76	2 66	98	1 02
St. Joseph's Hospital	London	38,527	39,261 96	99,508 26	138,770 22	2 58	1 02	1 11
General Hospital	Pembroke	27,419	15,968 49	41,491 67	57,460 16	1 51	58	48
St. Joseph's Hospital	Port Arthur	29,404	21,440 43	65,469 83	86,910 26	2 23	73	87
General Hospital	Sault Ste. Marie	19,143	13,661 55	31,823 49	45,485 04	1 66	71	1 02
Stratford General Hospital	Stratford	19,989	19,403 58	49,621 68	69,025 26	2 48	97	1 13
St. Joseph's Hospital	Sudbury	26,957	18,247 65	75,221 29	93,468 94	2 79	68	1 09
St. Joseph's Hospital	Toronto	41,834	28,333 33	94,798 62	123,131 95	2 27	68	1 20
Metropolitan General Hos	Walkerville	8,731	13,962 62	61,893 88	75,856 50	7 09	1 59	4 23
Salvation Army Grace Hos	Windsor	28,978	29,676 02	11,918 27	41,594 29	1 44	1 02	1 44
Hotel Dieu Hospital	"	36,448	42,985 91	128,187 37	171,173 28	4 69	1 18	1 43
Total		463,334	402,805 80	1,143,481 68	1,546,287 48	2 47	87	1 31
Group 5—Bed capacity, 200 and over			$ c.	$ cc.	$ c.	$ c.	$ c.	$ c.
General Hospital	Hamilton	143,175	115,443 70	397,688 91	513,132 61	3 58	80	1 49
Kingston General Hospital	Kingston	64,779	74,479 83	140,782 92	215,262 75	3 32	1 12	1 07
Victoria General Hospital	London	90,541	90,459 94	299,543 45	390,003 39	4 31	1 00	1 98
Ottawa Civic Hospital	Ottawa	138,937	149,113 65	392,688 68	541,802 33	3 90	1 09	1 74
General Hospital	"	65,676	45,186 08	151,487 70	196,673 78	2 99	69	1 12
General Hospital	Toronto	250,231	245,248 31	801,389 40	1,046,637 71	4 18	98	1 85
Hospital for Sick Children	"	86,885	76,387 69	341,960 30	418,347 99	4 82	89	2 37
St. Michael's Hospital	"	103,971	93,226 18	286,142 08	379,368 26	3 65	90	1 38
Western Hospital and Grace Hospital	"	137,317	130,748 34	419,535 59	550,283 93	4 08	95	1 68
Total		1081512	1,020,293 72	3,231,219 03	4,251,512 75	3 93	94	1 63
Grand Totals		2331160	2,183,373.50	6,579,255.02	8,762,628.52			

TABLE VII.—Shows the amount of Government grant, as reported in the financial statements submitted by the hospitals, together with all other earnings, and the total hospital maintenance expense.

GENERAL HOSPITALS—Continued

Name of Hospital	Location.	All earnings, donations, etc., exclusive of Government grant.	Government grant in aid of maintenance as taken from hospital statements.	Total earnings, donations, etc., for maintenance.	Total expense for maintenance.
Group 1—Bed capacity, 1 to 25		$ c.	c.	$ c.	$ c.
Stevenson Memorial Hospital	Alliston	2,772 09	.....	2,772 09	4,098 60
Rosamond Memorial Hospital	Almonte	14,682 57	1,114 00	15,796 57	13,887 85
General Hospital	Bowmanville	14,937 81	832 20	15,770 01	15,799 45
Peel Memorial Hospital	Brampton	12,058 52	1,789 60	13,848 12	12,582 86
Public Hospital	Clinton	10,820 14	91 50	10,911 64	10,004 93
Haldimand County Memorial Hospital	Dunnville	15,895 60	1,665 50	17,561 10	16,290 89
General Hospital	Durham	9,233 47	1,302 50	10,535 97	6,621 64
General and Marine Hospital	Goderich	12,874 00	564 00	13,438 00	13,431 00
Memorial Hospital	Hanover	8,564 76	1,277 70	9,842 46	9,959 64
Notre Dame Hospital	Hawkesbury	7,482 23	677 50	8,159 73	15,710 36
St. Paul's Hospital	Hearst	7,751 87	1,511 00	9,262 87	8,996 97
Listowel Memorial Hospital	Listowel	11,071 70	1,344 50	12,416 20	11,264 75
Rosedale War Memorial Hospital	Matheson	5,868 92	742 50	6,611 42	6,818 26
Mount Forest General Hospital	Mount Forest	5,188 94	622 50	5,811 44	5,807 83
York County Memorial Hospital	Newmarket	17,844 77	1,718 50	19,563 27	16,078 52
Cottage Hospital	Niagara-on-Lake	4,659 34	642 40	5,301 74	5,174 36
Willett Hospital	Paris	14,981 41	2,210 70	17,192 11	17,710 19
General Hospital	Penetang	8,963 87	619 50	9,583 37	7,145 30
Seaforth Memorial Hospital	Seaforth	7,988 46	893 00	8,881 46	9,239 55
General Hospital	Sioux Lookout	15,123 71	2,064 00	17,187 71	13,687 77
Presbyterian Hospital	So. Porcupine	8,272 18	452 50	8,724 68	13,960 35
Brebeuf Hospital	Sturgeon Falls	4,340 45	437 50	4,777 95	5,800 76
Soldiers' Memorial Hospital	Tillsonburg	18,869 47	766 00	19,635 47	16,606 50
General Hospital	Wingham	10,191 79	111 00	10,302 79	10,441 47
Total		250,438 07	23,450 10	273,888 17	267,119 80
Group 2—Bed capacity, 26 to 50		$ c.	$ c.	$ c.	$ c.
Lady Minto Hospital	Chapleau	16,824 91	1,514 00	18,338 91	13,314 59
Cobalt Mines Hospital	Cobalt	24,111 88	3,271 10	27,382 98	25,169 22
General Hospital	Cobourg	13,363 65	1,442 50	14,806 15	15,158 44
Lady Minto Hospital	Cochrane	17,747 75	4,268 60	22,016 35	21,749 66
General and Marine Hospital	Collingwood	23,963 52	2,537 20	26,500 72	28,588 19
Royal Alexandra Hospital	Fergus	15,426 81	285 00	15,711 81	15,608 27
Alexandra Hospital	Ingersoll	12,271 84	747 50	13,019 34	12,737 04
Anson General Hospital	Iroquois Falls	10,999 05	1,925 20	12,924 25	30,471 98
General Hospital	Kenora	23,452 51	1,147 30	24,599 81	20,360 94
St. Joseph's Memorial Hospital	"	19,703 92	2,055 00	21,758 92	21,748 00
General Hospital	Kincardine	13,231 34	385 50	13,616 84	11,992 99
Ross Memorial Hospital	Lindsay	34,642 29	1,988 30	36,630 59	35,147 75
Bethesda Hospital	London	20,706 44	2,821 65	23,528 09	14,188 73
St. Andrew's Hospital	Midland	28,043 09	1,707 50	29,750 59	22,247 69
Queen Victoria Hospital	North Bay	32,096 71	3,707 50	35,804 21	33,821 36
Lord Dufferin Hospital	Orangeville	17,722 36	1,156 70	18,879 06	19,762 06
Salvation Army Maternity Hospital	Ottawa	28,693 36	4,852 80	33,546 16	32,458 21
Stone Memorial Hospital	Parry Sound	15,718 38	5,080 00	20,798 38	13,162 28
St. Joseph's Hospital	" "	9,434 90	1,873 00	11,307 90	12,448 81
Cottage Hospital	Pembroke	37,602 48	2,091 90	39,694 38	35,554 09
Great War Memorial Hospital	Perth	29,392 74	3,846 50	33,239 24	27,100 95
C. E. Englehart Memorial Hospital	Petrolia	28,999 18	1,267 90	30,267 08	25,168 79
Prince Edward County	Picton	15,316 18	1,180 00	16,496 18	12,147 47
General Hospital	Port Arthur	43,828 28	4,252 40	48,080 68	38,440 16
General Hospital	Port Hope	17,409 00	779 70	18,188 70	15,637 72
Victoria General Hospital	Renfrew	23,567 51	1,666 00	25,233 51	20,598 09
Plummer Memorial Hospital	Sault Ste. Marie	20,931 81	2,260 50	23,192 31	20,860 05
Norfolk General Hospital	Simcoe	31,678 42	3,667 90	35,346 32	29,297 32
St. Francis' Hospital	Smiths Falls	21,794 43	2,216 00	24,010 43	21,340 99
General Hospital	Strathroy	26,192 21	477 00	26,669 21	23,881 55
Mount Sinai Hospital	Toronto	27,185 16	1,806 00	28,991 16	27,701 78
Orthopedic Hospital	"	53,797 66	1,428 90	55,226 56	41,614 23
General Hospital	Walkerton	17,747 82	983 30	18,731 12	14,866 58
Total		773,597 59	70,690 35	844,287 94	754,345 98

TABLE VII.—Shows the amount of Government grant, as reported in the financial statements submitted by the hospitals, together with all other earnings, and the total hospital maintenance expense.—*Continued.*

GENERAL HOSPITALS—Continued

Name of Hospital.	Location.	All earnings, donations, etc., exclusive of Government grant.	Government grant in aid of maintenance, as taken from hospital statement.	Total earnings, donations, etc., for maintenance.	Total expense for maintenance.
Group 3—Bed capacity, 51 to 100		$ c.	$ c.	$ c.	$ c.
Royal Victoria Hospital	Barrie	34,249 31	1,502 20	35,751 51	34,595 02
General Hospital	Belleville	100,824 15	2,995 20	103,819 35	88,023 86
General Hospital	Brockville	61,146 52	2,699 50	63,846 02	57,636 04
St. Vincent de Paul	"	54,198 60	3,853 10	58,051 70	58,477 55
Public General Hospital	Chatham	62,423 04	4,507 90	66,930 94	60,428 20
St. Joseph's Hospital	"	57,301 23	2,680 20	59,981 43	45,954 53
Cornwall General Hospital	Cornwall	47,927 31	3,357 60	51,284 91	47,601 13
Hotel Dieu Hospital	"	59,628 90	7,777 20	67,406 10	66,681 40
General Hospital	Galt	57,099 60	3,437 50	60,537 10	63,433 68
St. Joseph's Hospital	Guelph	67,746 41	6,514 70	91,621 11	73,533 94
Kitchener-Waterloo Hospital	Kitchener	71,396 68	4,158 50	75,555 18	64,219 73
St. Mary's Hospital	"	66,441 53	7,189 20	73,630 73	55,264 55
General Hospital	Mattawa	12,379 33	4,000 00	16,379 33	34,722 16
Niagara Falls General Hospital	Niagara Falls	63,082 64	5,284 30	68,366 94	56,284 02
Orillia Soldiers' Memorial Hospital	Orillia	44,474 92	4,059 40	48,534 32	41,875 94
Oshawa General Hospital	Oshawa	75,752 98	3,300 30	79,053 28	64,222 23
Misericordia Maternity Hospital	Ottawa	53,704 54	6,441 15	60,145 69	81,033 58
Ottawa Protestant Children's Hospital	"	17,681 03	3,433 40	21,114 43	21,061 00
General and Marine Hospital	Owen Sound	44,457 56	2,524 30	46,981 86	41,314 44
Nicholls Hospital	Peterborough	76,780 74	3,297 40	80,078 14	80,911 48
St. Joseph's Hospital	"	42,185 58	5,449 90	47,635 48	40,375 68
General Hospital	St. Catharines	100,095 76	3,166 00	103,261 76	110,119 19
Memorial Hospital	St. Thomas	86,603 73	9,209 00	95,812 73	89,169 06
General Hospital	Sarnia	49,371 33	2,582 50	51,953 83	54,463 56
Public Hospital	Smiths Falls	37,310 18	3,576 80	40,886 98	37,646 07
St. Mary's Hospital	Timmins	51,720 38	7,533 90	59,254 28	50,653 62
St. John's Hospital	Toronto	79,215 47	3,519 40	82,734 87	92,926 22
Salvation Army Women's Hospital	"	48,264 26	8,106 50	56,370 76	55,658 66
Wellesley Hospital	"	213,004 13	.....	213,004 13	193,251 86
Women's College Hospital	"	58,915 34	2,528 00	61,443 34	71,581 30
Welland County Hospital	Welland	34,171 43	2,184 60	36,356 03	38,034 21
Woodstock Hospital	Woodstock	49,485 58	1,502 79	50,988 37	48,726 39
Total		1,979,040 19	132,372 44	2,128,772 63	1,989,850 30
Group 4—Bed capacity, 101 to 200		$ c.	$ c.	$ c.	$ c.
Brantford General Hospital	Brantford	141,889 12	16,135 80	158,024 92	159,074 34
McKellar General Hospital	Fort William	125,288 54	12,367 00	137,655 54	131,148 07
Guelph General Hospital	Guelph	80,414 93	5,443.90	85,858 83	81,758 44
St. Joseph's Hospital	Hamilton	146,655 69	7,641 60	154,297 29	138,499 97
Hotel Dieu Hospital	Kingston	117,709 25	11,799 00	129,508 25	132,930 76
St. Joseph's Hospital	London	150,471 94	4,301 60	154,773 54	138,770 22
General Hospital	Pembroke	62,185 36	8,968 80	71,154 16	57,460 16
St. Joseph's Hospital	Port Arthur	75,594 44	9,594 00	85,188 44	86,910 26
General Hospital	Sault Ste. Marie	42,639 82	4,221 00	46,860 82	45,485 04
Stratford General Hospital	Stratford	76,941 04	3,596 20	80,537 24	69,025 26
St. Joseph's Hospital	Sudbury	95,532 44	10,038 30	105,570 74	93,468 94
St. Joseph's Hospital	Toronto	122,250 50	22,227 80	144,478 30	123,131 95
Metropolitan Hospital	Walkerville	41,586 56	5,238 00	46,824 56	75,856 50
Salvation Army Grace Hospital	Windsor	117,399 94	14,222 60	131,622 54	41,594 29
Hotel Dieu Hospital	"	127,682 39	10,032 10	137,714 49	171,173 28
Total		1,524,241 96	145,827 70	1,670,069 66	1,546,287 48
Group 5—Bed capacity, 200 and over		$ c.	$ c.	$ c.	$ c.
General Hospital	Hamilton	454,545 71	58,586 90	513,132 61	513,132 61
Kingston General Hospital	Kingston	216,117 17	15,459 70	231,576 87	215,262 75
Victoria General Hospital	London	393,422 21	16,867 90	410,290 11	390,003 39
Ottawa Civic Hospital	Ottawa	492,800 22	32,437 80	525,238 02	541,802 33
General Hospital	"	201,256 40	16,676 10	649,682 50	196,673 78
General Hospital	Toronto	1,037,451 51	108,378 60	1,145,830 11	1,046,637 75
Hospital for Sick Children	"	377,944 54	47,689 10	425,633 64	418,348 42
St. Michael's Hospital	"	342,054 63	41,146 30	383,200 93	379,368 26
Western Hospital and Grace Hospital	"	511,336 76	52,518 00	563,854 76	550,283 93
Total		4,017,199 00	389,760 40	4,848,439 55	4,251,513 22
Grand Total		8,554,246.96	762,100.99	9,316,347.95	8,809,116.78

RED CROSS OUTPOST HOSPITALS

TABLE I.

Name of Hospital.	Location.	Bed capacity.	Number remaining under treatment, Oct. 1, 1927.	Number admitted during the year ending Sept. 30th, 1928.	Number of births during year.	Total number under treatment during year ending Sept. 30, 1928.	Number discharged during year.	Number of deaths during year.	Number under treatment on Sept. 30, 1928.	Percentage of deaths to total number under treatment.
Red Cross Hospital	Apsley	3	.....	25	11	36	30	3	3	8.33
Red Cross Hospital	Bancroft	7	5	141	36	182	167	10	5	5.49
Red Cross Hospital	Coehill	6	.....	29	8	37	35	2	.....	5.41
Red Cross Hospital	Dryden	19	6	270	52	328	306	15	7	4.57
Red Cross Hospital	Englehart	10	4	130	20	154	140	9	5	5.84
Red Cross Hospital	Haileybury	11	6	215	19	240	225	7	8	2.92
Red Cross Hospital	Hornepayne	7	1	61	16	78	74	1	3	1.28
Red Cross Hospital	Kirkland Lake	14	15	465	41	521	486	18	17	3.45
Red Cross Hospital	Lions Head	3	.....	20	10	30	26	4	.....	13.33
Red Cross Hospital	Loring	5	.....	21	12	33	30	1	2	3.03
Red Cross Hospital	Nakina	6	.....	76	9	85	83	2	.....	2.35
Lady Minto Hospital	New Liskeard	18	7	268	23	298	271	18	9	6.04
Red Cross Hospital	Quibell	4	.....	9	3	12	12	.....	.....	.0
Red Cross Hospital	Rainy River	7	5	100	18	123	112	7	4	5.69
Red Cross Hospital	Redditt	6	.....	7	3	10	10	.....	.....	.0
Red Cross Hospital	St. Joseph's Island	9	9	69	7	85	76	7	2	8.23
Red Cross Hospital	Thessalon	10	6	148	15	169	150	9	10	5.33
Red Cross Hospital	Whitney	3	1	32	2	35	35	.....	.....	.0
Red Cross Hospital	Wilberforce	3	.....	14	3	17	16	1	.....	5.88
Total		151	65	2,100	308	2,473	2,284	114	75	4.61

TABLE II.

Name of Hospital.	Location.	Number of patients, including infants.	Collective stay of infants under one year of age.	Collective stay of adult patients.	Total collective stay of adults and infants.	Average stay of patients, including infants.
Red Cross Hospital	Apsley	36	115	207	322	9
Red Cross Hospital	Bancroft	182	355	1,038	1,393	8
Red Cross Hospital	Coehill	37	76	253	329	9
Red Cross Hospital	Dryden	328	541	2,654	3,195	10
Red Cross Hospital	Englehart	154	322	1,376	1,698	11
Red Cross Hospital	Haileybury	240	193	2,071	2,264	9
Red Cross Hospital	Hornepayne	78	175	576	751	9
Red Cross Hospital	Kirkland Lake	521	500	4,773	5,273	10
Red Cross Hospital	Lions Head	30	82	196	278	9
Red Cross Hospital	Loring	33	128	235	363	11
Red Cross Hospital	Nakina	85	141	755	896	11
Lady Minto Hospital	New Liskeard	298	309	3,232	3,541	12
Red Cross Hospital	Quibell	12	31	66	97	8
Red Cross Hospital	Rainy River	123	203	1,169	1,372	11
Red Cross Hospital	Redditt	10	57	65	122	12
Red Cross Hospital	St. Joseph's Island	85	90	1,052	1,142	13
Red Cross Hospital	Thessalon	169	174	2,011	2,185	13
Red Cross Hospital	Whitney	35	12	143	155	4
Red Cross Hospital	Wilberforce	17	36	117	153	9
Total		2,473	3,540	21,989	25,529	10

RED CROSS OUTPOST HOSPITALS—Continued

TABLE III.

Name of Hospital.	Location.	Collective days' stay, exclusive of infants	Deduction for incurable and lying-in patients. (Refuge rate.)	Deduction for pay patient days.	No. of days for which Government grant is allowed at 50c.	No. of days for which Government grant is allowed at 60c.	Total days for which Government grant is allowed.
Red Cross Hospital	Apsley	198			86	112	198
Red Cross Hospital	Bancroft	1,060			472	588	1,060
Red Cross Hospital	Coehill	260			135	125	260
Red Cross Hospital	Dryden	2,703			1,609	1,094	2,703
Red Cross Hospital	Englehart	1,895	1		1,086	808	1,895
Red Cross Hospital	Haileybury	2,025			1,202	823	2,025
Red Cross Hospital	Hornepayne	575			413	162	575
Red Cross Hospital	Kirkland Lake	4,745	44		2,495	2,206	4,745
Red Cross Hospital	Lions Head	203			72	131	203
Red Cross Hospital	Loring	224			129	95	224
Red Cross Hospital	Nakina	798			243	555	798
Lady Minto Hospital	New Liskeard	3,253		3,253			
Red Cross Hospital	Quibell	66			25	41	66
Red Cross Hospital	Rainy River	1,199			736	463	1,199
Red Cross Hospital	Redditt	65				65	65
Red Cross Hospital	St. Joseph's Island	752			586	166	752
Red Cross Hospital	Thessalon	1,765			975	790	1,765
Red Cross Hospital	Whitney	143			84	59	143
Red Cross Hospital	Wilberforce	119			63	56	119
Total		22,048	45	3,253	10,411	8,339	18,795

TABLE IV.

Name of Hospital.	Location.	*Amount from Municipalities as a grant and for patients' maintenance.	Amount from patients for board.	*Subscriptions and donations of private individuals and incidental receipts.	Total from all sources other than Government grant.
		$ c.	$ c.	$ c.	$ c.
Red Cross Hospital	Apsley		470 25		470 25
Red Cross Hospital	Bancroft		2,231 12		2,231 12
Red Cross Hospital	Coehill		532 45		532 45
Red Cross Hospital	Dryden		7,552 55		7,552 55
Red Cross Hospital	Englehart		3,492 00		3,492 00
Red Cross Hospital	Haileybury	500 00	6,436 67	100 00	7,036 67
Red Cross Hospital	Hornepayne		1,728 75	87 00	1,815 75
Red Cross Hospital	Kirkland Lake		11,521 75	500 00	12,021 75
Red Cross Hospital	Lions Head		473 80		473 80
Red Cross Hospital	Loring		560 50		560 50
Red Cross Hospital	Nakina		1,414 00		1,414 00
Lady Minto Hospital	New Liskeard	1,000 00	7,066 47		8,066 47
Red Cross Hospital	Quibell		135 80		135 80
Red Cross Hospital	Rainy River		2,400 80		2,400 80
Red Cross Hospital	Redditt		41 25		41 25
Red Cross Hospital	St. Joseph's Island		2,579 92		2,579 92
Red Cross Hospital	Thessalon		3,363 85		3,363 85
Red Cross Hospital	Whitney		413 15		413 15
Red Cross Hospital	Wilberforce		536 25		536 25
Total		1,500 00	52,951 33	687 00	55,138 33

*Amounts under this heading are mostly collected and apportioned by the Head Office of the Red Cross Society and therefore do not appear under the different hospitals.

RED CROSS OUTPOST HOSPITALS—Continued

TABLE V.

Name of Hospital.	Location.	Collective days' stay upon which Hospital grants are based.	Amount of grant for proper hospital cases.	Collective days' stay in excess of 120 days.	Computation at refuge rate of 10c. per day.	No. of days at $2.00.	Amount at $2.00.	Total grant payable by Legislature.
			$ c.		$ c.			$ c.
Red Cross Hospital.....	Apsley.....	198	110 20	.....	.....	.....	.....	110 20
Red Cross Hospital.....	Bancroft.....	1,060	588 80	.....	.....	.....	.....	588 80
Red Cross Hospital.....	Coehill.....	260	142 50	.....	.....	.....	.....	142 50
Red Cross Hospital.....	Dryden.....	2,703	1,460 90	.....	.....	.....	.....	1,460 90
Red Cross Hospital.....	Englehart.....	1,895	1,027 80	1	10	.....	.....	1,027 90
Red Cross Hospital.....	Haileybury.....	2,025	1,094 80	.....	.....	.....	.....	1,094 80
Red Cross Hospital.....	Hornepayne.....	575	303 70	.....	.....	.....	.....	303 70
Red Cross Hospital.....	Kirkland Lake.....	4,745	2,571 10	44	4 40	.....	.....	2,575 50
Red Cross Hospital.....	Lions Head.....	203	114 10	.....	.....	.....	.....	114 10
Red Cross Hospital.....	Loring.....	224	121 50	.....	.....	.....	.....	121 50
Red Cross Hospital.....	Nakina.....	798	454 50	.....	.....	.....	.....	454 50
Lady Minto Hospital...	New Liskeard.....	.....	.....	.....	.....	.....	.....	.....
Red Cross Hospital.....	Quibell.....	66	37 10	.....	.....	.....	.....	37 10
Red Cross Hospital.....	Rainy River.....	1,199	645 80	.....	.....	.....	.....	645 80
Red Cross Hospital.....	Redditt.....	65	39 00	.....	.....	.....	.....	39 00
Red Cross Hospital.....	St. Joseph's Island.	752	392 60	.....	.....	.....	.....	392 60
Red Cross Hospital.....	Thessalon.....	1,765	961 50	.....	.....	.....	.....	961 50
Red Cross Hospital.....	Whitney.....	143	77 40	.....	.....	.....	.....	77 40
Red Cross Hospital.....	Wilberforce.....	119	65 10	.....	.....	.....	.....	65 10
Total.....	.....	18,795	10,208 40	45	4 50	.....	.....	10,212 90

TABLE VI.

Name of Hospital.	Location.	Collective days' stay, exclusive of infants.	Cost of dietaries.	Salaries, fuel, light, medicine, bedding, and all other maintenance expenditure.	Total expenditure for maintenance.	*Average cost of each adult patient per day.	Average dietary cost per day.	Average salaries cost per patient per day.
			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Red Cross Hospital.....	Apsley.....	207	460 10	2,588 61	3,048 71	14 72	2 22	8 46
Red Cross Hospital.....	Bancroft.....	1,038	1,078 37	4,172 51	5,250 88	5 09	1 04	2 97
Red Cross Hospital.....	Coehill.....	253	514 89	2,448 57	2,963 46	11 71	2 04	6 48
Red Cross Hospital.....	Dryden.....	2,654	2,500 34	8,040 60	10,540 94	3 97	94	1 70
Red Cross Hospital.....	Englehart.....	1,376	1,356 30	5,415 00	6,771 30	4 92		2 53
Red Cross Hospital.....	Haileybury.....	2,071	2,283 37	7,259 92	9,543 29	4 61	1 10	2 33
Red Cross Hospital.....	Hornepayne.....	576	1,391 85	4,165 85	5,557 70	9 65	2 42	4 64
Red Cross Hospital.....	Kirkland Lake.....	4,773	4,348 65	13,832 39	18,181 04	3 81	91	1 66
Red Cross Hospital.....	Lions Head.....	196	464 59	2,486 68	2,951 27	15 06	2 37	8 79
Red Cross Hospital.....	Loring.....	235	606 93	2,456 94	3,063 87	13 03	2 58	7 04
Red Cross Hospital.....	Nakina.....	755	834 86	4,052 95	4,887 81	6 47	1 11	3 47
Lady Minto Hospital...	New Liskeard.....	3,232	2,558 20	8,869 82	11,428 02	3 54	79	1 87
Red Cross Hospital.....	Quibell.....	66	360 04	2,702 63	3,062 67	46 40	5 46	30 33
Red Cross Hospital.....	Rainy River.....	1,169	817 29	4,653 21	5,470 50	4 68	69	2 78
Red Cross Hospital.....	Redditt.....	65	223 42	1,366 26	1,589 68	24 45	3 44	10 90
Red Cross Hospital.....	St. Joseph's Island.	1,052	967 42	4,893 50	5,860 92	5 57	92	3 54
Red Cross Hospital.....	Thessalon.....	2,011	1,535 28	6,440 39	7,975 67	3 96	76	2 35
Red Cross Hospital.....	Whitney.....	143	487 16	2,779 67	3,266 83	22 84	3 41	14 19
Red Cross Hospital.....	Wilberforce.....	117	356 51	2,305 17	2,661 68	22 75	3 05	14 62
Total.....	.....	21,989	23,145 57	90,930 67	114,076 24	5 19	1 05	6 88

*The "Average cost of each patient per day" includes cost of attendance on outpatients, which entails heavy travelling expenses in the outlying districts.

RED CROSS OUTPOST HOSPITALS—Continued

TABLE VII.

Name of Hospital.	Location.	*All earnings, donations, etc., exclusive of Government grant.	Government grant in aid of maintenance.	Total earnings, donations, etc., for maintenance.	Total expense for maintenance.	Net cost to Canadian Red Cross Society for Operation of Hospital.
		$ c.	$ c.	$ c.	$ c.	$ c.
Red Cross Hospital.....	Apsley.....	470 25	110 20	580 45	3,048 71	2,468 26
Red Cross Hospital.....	Bancroft.....	2,231 12	588 80	2,819 92	5,250 88	2,430 96
Red Cross Hospital.....	Coehill.....	532 45	142 50	674 95	2,963 46	2,288 51
Red Cross Hospital.....	Dryden.....	7,552 55	1,460 90	9,013 45	10,540 94	1,527 49
Red Cross Hospital.....	Englehart.....	3,492 00	1,027 90	4,519 90	6,771 30	2,251 40
Red Cross Hospital.....	Haileybury.....	6,436 67	1,094 80	7,531 47	9,543 29	2,011 82
Red Cross Hospital.....	Hornepayne.....	1,728 75	303 70	2,032 45	5,557 70	3,525 25
Red Cross Hospital.....	Kirkland Lake....	11,521 75	2,575 50	14,097 25	18,181 04	4,083 79
Red Cross Hospital.....	Lions Head.....	473 80	114 10	587 90	2,951 27	2,363 37
Red Cross Hospital.....	Loring.....	560 50	121 50	682 00	3,063 87	2,381 87
Red Cross Hospital.....	Nakina.....	1,414 00	454 50	1,868 50	4,887 81	3,019 31
Lady Minto Hospital...	New Liskeard.....	7,066 47	.....	7,066 47	11,428 02	4,361 55
Red Cross Hospital.....	Quibell.....	135 80	37 10	172 90	3,062 67	2,889 77
Red Cross Hospital.....	Rainy River.....	2,400 80	645 80	3,046 60	5,470 50	2,423 90
Red Cross Hospital.....	Redditt.....	41 25	39 00	80 25	1,589 68	1,509 43
Red Cross Hospital.....	St. Joseph's Island.	2,579 92	392 60	2,972 52	5,860 92	2,888 40
Red Cross Hospital.....	Thessalon.....	3,363 85	961 50	4,325 35	7,975 67	3,650 32
Red Cross Hospital.....	Whitney.....	413 15	77 40	490 55	3,266 83	2,776 28
Red Cross Hospital.....	Wilberforce.....	536 25	65 10	601 35	2,661 68	2,060 33
Total.....	.....	**52,951 33**	**10,212 90**	**63,164 23**	**114,076 24**	**50,912 01**

*See note under Table IV.

SANATORIA FOR CONSUMPTIVES

TABLE I.

Name of Sanatoria.	Location.	Bed capacity.	Number remaining under treatment, Oct. 1, 1927.	Number admitted during the year ending Sept. 30, 1928.	Number of births during the year.	Total number under treatment during year ending Sept. 30, 1928.	Number discharged during year.	Number of deaths during year.	Number under treatment on Sept. 30, 1928.
Brant Sanatorium.....	Brantford.....	70	57	55	....	112	34	4	74
*Muskoka Hospital for Consumptives.	Gravenhurst....	346	319	445	....	764	383	57	324
Mountain Sanatorium.....	Hamilton.....	395	343	293	....	636	212	65	359
Freeport Sanatorium.....	Kitchener.....	70	73	49	....	122	38	14	70
Queen Alexandra Sanatorium.....	London.....	346	319	455	....	774	353	75	346
Royal Ottawa Sanatorium.....	Ottawa.....	138	105	166	....	271	94	39	138
St. Catharines Sanatorium.....	St. Catharines...	20	18	26	....	44	17	8	19
Essex County Sanatorium.....	Sandwich.....	87	77	106	....	183	90	9	84
Preventorium.....	Toronto.....	108	62	168	....	230	159	.....	71
†Toronto Hospital for Consumptives...	Weston	391	337	359	3	699	213	142	344
Total.....	.....	1,971	1,710	2,122	3	3,835	1,593	413	1,829

*Includes Muskoka Cottage Sanatorium. †Includes Queen Mary Hospital for Consumptive Children.

SANATORIA FOR CONSUMPTIVES—Continued

TABLE II.

Name of Sanatoria.	Location.	Number of patients including infants.	Collective stay of infants under one year of age.	Collective stay of adult patients.	Total collective stay of adults and infants.	Average stay of patients including infants.
Brant Sanatorium	Brantford	112	.....	25,194	25,194	224.9
Muskoka Hospital for Consumptives	Gravenhurst	764	.....	118,833	118,833	155.5
Mountain Sanatorium	Hamilton	636	.....	128,798	128,798	202.5
Freeport Sanatorium	Kitchener	122	.....	26,781	26,781	219.5
Queen Alexandra Sanatorium	London	774	.....	226,622	226,622	292.8
Royal Ottawa Sanatorium	Ottawa	271	.....	43,890	43,890	161.9
St. Catharines Sanatorium	St. Catharines	44	.....	7,056	7,056	160.
Essex County Sanatorium	Sandwich	183	.....	30,087	30,087	164.
Preventorium	Toronto	230	.....	29,360	29,360	127.6
Toronto Hospital for Consumptives	Weston	699	129	128,849	128,978	184.3
Total	.....	3,835	129	765,470	765,599	199.6

TABLE III.

Name of Sanatoria.	Location.	Collective days' stay exclusive of infants under 1 year of age.	Deductions for incurable and lying-in patients. (Refuge rate).	Deductions for pay patient days.	No. of days for which Government grant is allowed.
Brant Sanatorium	Brantford	25,233	.....	.....	25,233
Muskoka Hospital for Consumptives	Gravenhurst	108,578	.....	.....	108,578
Mountain Sanatorium	Hamilton	128,706	.....	.....	128,706
Freeport Sanatorium	Kitchener	26,300	.....	.....	26,300
Queen Alexandra Sanatorium	London	83,888	.....	.....	83,888
Royal Ottawa Sanatorium	Ottawa	43,150	.....	.....	43,150
St. Catharines Sanatorium	St. Catharines	6,990	.....	.....	6,990
Essex County Sanatorium	Sandwich	28,799	.....	.....	28,799
Preventorium	Toronto	29,258	.....	.....	29,258
Toronto Hospital for Consumptives	Weston	122,460	.....	.....	122,460
Total	.....	603,362	.....	.....	603,362

TABLE IV.

Name of Sanatoria.	Location.	Amount from Municipalities as a grant and for patients' maintenance.	Amount from patients for board.	Amount as income from property or investments belonging to hospital.	Subscriptions and donations of private individuals and incidental receipts.	Total from all sources other than Government grant.
		$ c.	$ c.	$ c.	$ c.	$ c.
Brant Sanatorium	Brantford	23,533 50	1,900 00	83 61	2,582 51	28,099 62
Muskoka Hospital for Consumptives	Gravenhurst	127,511 02	33,101 28	51,653 92	32,802 35	245,068 57
Mountain Sanatorium	Hamilton	180,211 00	48,353 90	400 68	80,900 56	309,866 14
Freeport Sanatorium	Kitchener	8,100 00	41,485 00	.....	11,019 37	60,604 37
Queen Alexandra Sanatorium	London	200,974 50	36,234 75	.....	44,251 28	281,460 53
Royal Ottawa Sanatorium	Ottawa	56,828 66	8,994 11	.....	430 00	66,252 77
St. Catharines Sanatorium	St. Catharines	9,985 50	697 85	1,708 70	742 16	13,134 21
Essex County Sanatorium	Sandwich	32,912 69	15,381 03	.....	10,228 09	58,521 81
Preventorium	Toronto	30,954 75	1,604 38	988 78	395 40	33,943 31
Toronto Hospital for Consumptives	Weston	171,090 76	14,194 50	19,552 21	15,340 53	220,178 00
Total	.....	842,102 38	201,946 80	74,387 90	198,692 25	1,317,129 33

SANATORIA FOR CONSUMPTIVES—Continued

TABLE V.

Name of Sanatoria.	Location.	Collective days' stay upon which Hospital grants are passed.	Amount of grant for proper Hospital cases.	Government grant.
			$ c.	$ c.
Brant Sanatorium	Brantford	25,233	18,924 75	18,924 75
Muskoka Hospital for Consumptives	Gravenhurst	108,578	81,433 50	81,433 50
Mountain Sanatorium	Hamilton	128,706	96,529 50	96,529 50
Freeport Sanatorium	Kitchener	26,300	19,725 00	19,725 00
Queen Alexandra Sanatorium	London	83,888	62,916 00	62,916 00
Royal Ottawa Sanatorium	Ottawa	43,150	32,362 50	32,362 50
St. Catharines Sanatorium	St. Catharines	6,990	5,242 50	5,242 50
Essex County Sanatorium	Sandwich	28,799	21,599 25	21,599 25
Preventorium	Toronto	29,258	21,943 50	21,943 50
Toronto Hospital for Consumptives	"	122,460	91,845 00	91,845 00
Total		603,362	452,521 50	452,521 50

TABLE VI.

Name of Sanatoria.	Location.	Cost of dietaries.	Salaries, fuel, light, medicine, bedding, and all other maintenance expenditure.	Total expenditure for maintenance.	Average cost of each adult patient per day.	Average dietary cost per day.	Average salaries cost per patient per day.
		$ c.	$ c.	$ c.	$ c.	c.	$ c.
Brant Sanatorium	Brantford	10,044 85	25,732 04	35,776 89	1 42	39.86	64
Muskoka Hospital for Consumptives	Gravenhurst	94,626 98	195,918 18	290,545 16	2 44	79.63	78
Mountain Sanatorium	Hamilton	89,122 22	207,605 68	296,727 90	2 31	62.79	82
Freeport Sanatorium	Kitchener	15,581 11	43,135 82	58,716 93	2 19	58.18	85
Queen Alexandra Sanatorium	London	80,544 52	183,235 08	263,779 60	2 15	65.79	98
Royal Ottawa Sanatorium	Ottawa	21,111 03	76,193 24	97,304 27	2 25	48.09	1 10
St. Catharines Sanatorium	St. Catharines	4,152 07	12,278 45	16,430 52	2 35	58.84	91
Essex County Sanatorium	Sandwich	21,270 35	54,326 14	75,596 49	2 63	70.69	1 07
Preventorium	Toronto	9,846 90	34,574 12	44,421 02	1 52	33.54	69
Toronto Hospital for Consumptives	"	88,946 48	188,064 35	277,010 83	2 26	69.03	74
Total		435,246 51	1,021,063 10	1,456,309 61	1 89	72.13	94

TABLE VII.

Name of Sanatoria.	Location.	All earnings, donations, etc., exclusive of Government grant.	Government grant in aid of maintenance	Total earnings donations, etc., for maintenance.	Total expense for maintenance.
		$ c.	$ c.	$ c.	$ c.
Brant Sanatorium	Brantford	28,099 62	18,924 75	47,024 37	35,776 89
Muskoka Hospital for Consumptives	Gravenhurst	235,621 67	81,433 50	317,055 17	290,545 16
Mountain Sanatorium	Hamilton	307,159 69	96,529 50	403,689 19	296,727 90
Freeport Sanatorium	Kitchener	51,549 33	19,725 00	71,274 33	58,716 93
Queen Alexandra Sanatorium	London	281,939 78	62,916 00	344,855 78	263,779 60
Royal Ottawa Sanatorium	Ottawa	11,720 86	32,362 50	44,083 36	97,304 27
St. Catharines Sanatorium	St. Catharines	13,134 21	5,242 50	18,376 71	16,430 52
Essex County Sanatorium	Sandwich	58,521 81	21,599 25	80,121 06	75,596 49
Preventorium	Toronto	33,943 31	21,943 50	55,886 81	44,421 02
Toronto Hospital for Consumptives	"	220,178 00	91,845 00	312,023 00	277,010 83
Total		**1,241,868 28**	**452,521 50**	**1,694,389 78**	**1,456,309 61**

HOSPITALS, FOR INCURABLES

TABLE I.

Name of Hospital.	Location.	Bed capacity.	Number remaining under treatment, Oct. 1, 1927.	Number admitted during year ending Sept. 30, 1928.	Total number under treatment during year ending Sept. 30, 1928.	Number discharged during year.	Number of deaths during year.	Number under treatment on Sept. 30, 1928
Parkwood Hospital for Incurables	London	94	90	29	119	12	21	86
Perley Home for Incurables	Ottawa	91	57	26	83	2	7	74
St. Vincent Home for Incurables	"	140	32	49	81	3	8	70
Toronto Hospital for Incurables	Toronto	325	223	116	339	14	72	253
Home for Incurable Children	"	40	38	5	43	4	3	36
Mercy Home for Incurables	"	107	107	68	175	28	45	102
Total		797	547	293	840	63	156	621

TABLE II.

Name of Hospital.	Location.	Number of patients under treatment during year.	Collective stay of adult patients.	Average stay of patients.
Parkwood Hospital for Incurables	London	119	32,574	274
Perley Home for Incurables	Ottawa	83	22,750	274
St. Vincent Home for Incurables	"	81	11,879	147
Toronto Hospital for Incurables	Toronto	339	80,577	238
Home for Incurable Children	"	43	13,281	309
Mercy Home for Incurables	"	175	37,965	217
Total		840	199,026	237

TABLE III.

Name of Hospital.	Location.	Collective days stay, exclusive of infants under 1 year of age.	Number of days for which Government grant is allowed.
Parkwood Hospital for Incurables	London	32,574	29,707
Perley Home for Incurables	Ottawa	22,750	21,492
St. Vincent Home for Incurables	"	11,879	10,865
Toronto Hospital for Incurables	Toronto	80,577	77,576
Home for Incurable Children	"	13,281	13,281
Mercy Home for Incurables	"	37,965	38,075
Total		199,026	190,996

HOSPITALS FOR INCURABLES—Continued

TABLE IV.

Name of Hospital.	Location.	Amount from Municipalities as a grant and for patients' maintenance.	Amount from patients for board.	Amount as income from property or investments belonging to Hospital.	Subscriptions and donations of private individuals and incidental receipts.	Total from all sources other than Government grant.
		$ c.	$ c.	$ c.	$ c.	$ c.
Parkwood Hospital for Incurables	London	29,642 50	22,844 40	11,739 86	2,175 00	66,401 76
Perley Home for Incurables	Ottawa	10,879 00	11,831 90	1,164 90	4,325 00	28,200 80
St. Vincent Home for Incurables	"	13,744 50	2,332 35	716 30	2,713 46	19,506 61
Toronto Hospital for Incurables	Toronto	97,997 25	26,769 28	12,298 32	6,257 39	143,322 24
Home for Incurable Children	"	1,618 75	2,190 75	4,593 07	15,870 29	24,272 86
Mercy Home for Incurables	"	51,386 75	8,062 73	199 49	84 00	59,732 97
Total		205,268 75	74,031 41	30,711 94	31,425 14	341,437 24

TABLE V.

Name of Hospital.	Location.	Collective days' stay upon which Government grant is based—at 50c.	Collective days stay upon which Government grant is based—at 60c.	Total Government grant
				$ c.
Parkwood Hospital for Incurables	London	7,552	22,155	16,317 90
Perley Home for Incurables	Ottawa	9,877	11,615	11,907 50
St. Vincent Home for Incurables	"	4,389	6,476	6,080 10
Toronto Hospital for Incurables	Toronto	36,103	41,473	42,935 30
Home for Incurable Children	"	7,011	6,270	7,267 50
Mercy Home for Incurables	"	19,300	18,775	20,915 00
Total		84,232	106,764	105,423 30

HOSPITALS FOR INCURABLES—Continued

TABLE VI.

Name of Hospital.	Location.	Collective days' stay, exclusive of infants.	Cost of dietaries.	Salaries, fuel, light, medicine, bedding, and all other maintenance expenditure.	Total expenditure for maintenance.	Average cost of each patient per day.	Average dietary cost per day.	Average salaries cost per patient per day.
			$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
Parkwood Hospital for Incurables	London	32,574	11,615 33	39,441 04	51,056 37	1 56	35	67
Perley Home for Incurables	Ottawa	22,750	6,581 80	21,808 49	28,390 29	1 25	29	59
St. Vincent Home for Incurables	"	11,879	4,917 34	19,454 95	24,372 29	2 05	41	99
Toronto Hospital for Incurables	Toronto	80,577	66,364 11	160,032 10	226,396 21	2 81	82	95
Homefor Incurable Children	"	13,281	5,964 47	19,560 47	25,524 94	1 92	45	87
Mercy Home for Incurables	"	37,965	11,236 81	37,055 36	48,292 17	1 27	30	49
Total		199,026	106,679 86	297,352 41	404,032 27	2 03	54	78

TABLE VII.

Name of Hospital.	Location.	All earnings, donations, etc., exclusive of Government grant.	Government grant.	Total revenue for maintenance.	Total expense for maintenance.
		$ c.	$ c.	$ c.	$ c.
Parkwood Hospital for Incurables	London	65,491 76	16,317 90	82,719 66	51,056 37
Perley Home for Incurables	Ottawa	28,200 80	11,907 50	40,108 30	28,390 29
St. Vincent Home for Incurables	"	19,506 61	6,080 10	25,586 71	24,372 29
Toronto Hospital for Incurables	Toronto	143,322 24	42,935 30	186,257 54	226,396 21
Home for Incurable Children	"	24,272 86	7,267 50	31,540 36	25,524 94
Mercy Home for Incurables	"	59,732 97	20,915 00	80,647 97	48,292 17
Total		**341,437 24**	**105,423 30**	**446,869 54**	**404,032 27**

CITY REFUGES

TABLE I.

Name of Refuge.	Location.	Number of inmates on Sept. 30th, 1927.	Number admitted during the year.	Total number under lodgment during the year.	Total number discharged during the year.	Number of deaths during the year.	Number remaining in on Sept. 30th, 1928.
Home for Friendless	Belleville	12	3	15	1	1	13
The Widows' Home	Brantford	16	3	19	3	3	13
Home for the Friendless	Chatham	34	10	44	13	1	30
St. Paul's Home for the Aged	Cornwall	58	45	103	22	14	67
House of Providence	Dundas	130	40	170	26	14	130
Elliott Home	Guelph	26	6	32	1	4	27
House of Providence	"	52	12	64	16	7	41
Aged Women's Home	Hamilton	52	8	60	.....	8	52
Home for Aged and Infirm	"	157	52	209	27	25	157
St. Peter's Infirmary	"	13	19	32	4	10	18
Home for Friendless Women and Infants	Kingston	19	39	58	38	1	19
House of Providence	"	152	65	217	41	25	151
House of Refuge	"	54	15	69	8	10	51
House of Providence	London	200	34	234	33	11	190
London Convalescent Home	"	1	15	16	15	.....	1
McCormack Home for the Aged	"	57	62	119	24	27	68
District of Nipissing House of Refuge	North Bay	46	12	58	5	7	46
Elizabeth Residence for Elderly Ladies	Ottawa	18	14	32	12	2	18
Monastery of Our Lady of Charity	"	147	79	226	74	.....	152
Ottawa Home for Friendless Women	"	39	104	143	111	1	31
Protestant Home for the Aged	"	32	10	42	7	3	32
Protestant Orphans' Home, Refuge Branch	"	24	7	31	4	3	24
St. Charles Hospice	"	262	132	394	102	47	245
St. Patrick's Asylum, Refuge Branch	"	97	38	135	19	19	97
Women's Convalescent Home	"	3	110	113	101	.....	12
Parry Sound District House of Refuge	Powassan	22	12	34	8	2	24
Peterborough Protestant Home	Peterborough	34	18	52	15	1	36
St. Joseph's House of Providence	"	69	23	92	12	5	75
Thomas Williams Home	St. Thomas	16	5	21	2	1	18
District of Algoma House of Refuge	Sault Ste. Marie	72	24	96	10	13	73
Aged Men's Home	Toronto	54	20	74	11	9	54
Aged Women's Home	"	112	26	138	7	20	111
Church Home for the Aged	"	37	7	44	7	1	36
Good Shepherd Female Refuge	"	142	95	237	90	1	146
Haven and Prison Gate Mission	"	101	120	221	131	2	88
Hillcrest Convalescent Home	"	32	143	175	156	.....	19
Toronto House of Industry	"	163	49	212	74	16	122
House of Providence	"	423	171	594	162	22	410
Humewood House Association	"	23	80	103	75	.....	28
Jewish Old Folks' Home	"	38	8	46	2	5	39
*St. Mary's Convalescent Home	"	.....	43	43	39	.....	4
Julia Greenshields Home	"	30	5	35	1	4	30
Salvation Army Rescue Home	"	41	345	386	341	3	42
Toronto Industrial Refuge	"	83	49	132	70	1	61
Victor Home for Young Women	"	35	53	88	63	1	24
Home for the Friendless	Windsor	35	11	46	9	3	34
Total	.....	**3,263**	**2,241**	**5,504**	**1,992**	**353**	**3,159**

*Opened April 1st, 1928.

CITY REFUGES—Continued

TABLE II.

Name of Refuge.	Location.	Aggregate stay of inmates.	Cost of dietaries.	Cost of fuel, salaries and all general expenditure,	Total expenditure (ordinary).	Average cost per inmate per day
			$ c.	$ c.	$ c.	$ c.
Home for Friendless	Belleville	4,309	729 96	1,495 24	2,225 20	47
The Widows' Home	Brantford	5,793	1,297 61	2,620 15	3,917 76	68
Home for the Friendless	Chatham	5,556	2,041 01	4,022 25	6,062 26	1 09
St. Paul's Home for the Aged	Cornwall	23,568	3,929 83	9,124 50	13,054 33	55
House of Providence	Dundas	47,082	14,583 80	18,615 55	33,199 35	70
Elliott Home	Guelph	9,659	3,747 87	7,503 95	11,251 82	1 16
House of Providence	"	16,938	3,681 12	10,038 48	13,719 60	89
Aged Women's Home	Hamilton	9,427	4,153 84	8,113 70	12,267 54	1 30
Home for Aged and Infirm	"	58,311	14,128 05	19,542 95	33,671 00	57
St. Peter's Infirmary	"	5,168	2,100 00	31,825 00	33,925 00	6 56
Home for Friendless Women and Infants	Kingston	9,569	822 27	1,318 88	2,141 15	22
House of Providence	"	59,616	23,808 02	29,350 96	53,158 98	89
House of Refuge	"	18,311	4,960 50	8,286 36	13,246 86	72
House of Providence	London	35,208	14,510 31	16,997 58	31,507 89	89
London Convalescent Home	"	359	408 87	1,103 62	1,512 49	4 21
McCormack Home for the Aged	"	29,714	7,721 35	18,263 96	25,985 31	87
District of Nipissing House of Refuge	North Bay	16,918	4,186 36	14,642 34	18,828 70	1 11
Elizabeth Residence for Elderly Ladies	Ottawa	7,638	3,340 91	4,998 08	8,302 99	1 08
Monastery of Our Lady of Charity	"	52,389	7,531 07	14,908 56	22,439 63	42
Ottawa Home for Friendless Women	"	14,150	3,426 40	30,234 46	33,660 86	2 38
Protestant Home for the Aged	"	11,873	2,561 19	5,235 43	7,796 62	65
†Protestant Orphans' Home, Refuge Branch	"	8,344	.....	.....	.....	.....
St. Charles Hospice	"	98,493	24,183 34	41,080 20	65,263 54	67
St. Patrick's Asylum, Refuge Branch	"	35,786	6,863 52	21,666 08	28,529 60	79
Women's Convalescent Home	"	2,969	1,518 03	4,363 44	5,881 47	1 98
Parry Sound District House of Refuge	Powassan	8,868	2,120 93	5,982 20	8,103 13	99
Peterborough Protestant Home	Peterborough	12,525	2,837 07	6,732 66	9,569 73	76
St. Joseph's House of Providence	"	27,384	6,949 69	6,003 08	12,952 77	47
Thomas Williams Home	St. Thomas	6,123	1,659 61	5,338 88	6,998 49	1 14
District of Algoma House of Refuge	SaultSte.Marie	13,533	6,242 79	11,707 20	17,949 99	1 33
Aged Men's Home	Toronto	20,429	6,288 95	13,076 43	19,365 38	94
Aged Women's Home	"	40,862	12,794 38	23,657 82	36,452 20	89
Church Home for the Aged	"	13,566	5,068 89	11,097 80	16,166 69	1 19
Good Shepherd Female Refuge	"	55,116	18,851 93	16,973 47	35,825 40	65
Haven and Prison Gate Mission	"	35,871	8,529 78	24,120 63	32,650 41	91
Hillcrest Convalescent Home	"	10,966	5,738 91	9,668 12	15,407 03	1 40
Toronto House of Industry	"	24,294	5,670 21	5,670 22	11,340 43	47
House of Providence	"	73,817	37,862 10	36,876 58	74,738 68	1 01
Humewood House Association	"	9,749	2,682 30	7,621 21	10,303 51	1 05
Jewish Old Folks' Home	"	14,738	4,374 41	10,594 59	14,969 00	1 01
Julia Greenshields Home	"	10,699	4,949 85	9,677 70	14,627 55	1 36
*St. Mary's Convalescent Home	"	979	.....	.....	.....	.....
Salvation Army Rescue Home	"	15,633	2,735 82	8,594 37	11,330 19	72
Toronto Industrial Refuge	"	29,082	8,934 32	31,000 24	39,934 56	1 98
Victor Home for Young Women	"	5,891	1,935 58	6,290 35	8,225 93	1 39
Home for the Friendless	Windsor	12,231	3,152 21	3,505 50	6,657 71	54
Total	.....	**1,065,317**	**305,603 96**	**579,530 77**	**885,134 73**	**83**

*Opened April 1st, 1928.
†Financial returns included in other reports.

CITY REFUGES—Continued

TABLE III.

Name of Refuge.	Location.	Collective days' stay adults.	Collective days' stay at Orphanage rate.	Amount received from all sources other than Government.	Refuge days at 10 cents per day.	Orphanage days at 5 cents per day.	Government grant.
				$ c.	$ c.	$ c.	$ c.
Home for Friendless	Belleville	4,310	.....	1,800 00	431 00	.....	431 00
The Widows' Home	Brantford	5,784	.....	3,714 16	578 40	.....	578 40
Home for the Friendless	Chatham	10,875	.....	22,892 16	1,087 50	.....	1,087 50
St. Paul's Home for the Aged	Cornwall	23,613	.....	12,676 78	2,361 30	.....	2,361 30
House of Providence	Dundas	47,114	.....	28,510 85	4,711 40	.....	4,711 40
Elliott Home	Guelph	9,556	.....	13,698 42	955 60	.....	955 60
House of Providence	"	16,518	.....	12,217 05	1,651 80	.....	1,651 80
Aged Women's Home	Hamilton	18,770	.....	10,422 38	1,877 00	.....	1,877 00
Home for Aged and Infirm	"	57,888	.....	30,812 50	5,788 80	.....	5,788 80
St. Peter's Infirmary	"	5,217	.....	.....	521 70	.....	521 70
Home for Friendless Women and Infants	Kingston	1,500	5,615	1,933 40	150 00	280 75	430 75
House of Providence	"	59,326	272	47,259 72	5,932 60	13 60	5,946 20
House of Refuge	"	27,808	.....	11,868 04	2,780 80	.....	2,780 80
House of Providence	London	70,894	.....	26,854 61	7,089 40	.....	7,089 40
London Convalescent Home	"	359	.....	1,618 17	35 90	.....	35 90
McCormack Home for the Aged	"	29,832	.....	71,613 01	2,983 20	.....	2,983 20
Dist. of Nipissing House of Refuge	North Bay	16,920	.....	17,190 80	1,692 00	.....	1,692 00
Elizabeth Residence for Elderly Ladies	Ottawa	7,718	.....	9,161 90	771 80	.....	771 80
Monastery of Our Lady of Charity	"	38,822	10,894	17,792 33	3,882 20	544 70	4,426 90
Ottawa Home for Friendless Women	"	10,149	3,999	33,030 16	1,014 90	199 95	1,214 85
Protestant Home for the Aged	"	11,688	.....	7,549 53	1,168 80	.....	1,168 80
Protestant Orphans' Home, Refuge Branch	"	8,228	.....	32,365 93	822 80	.....	822 80
St. Charles Hospice	"	98,712	.....	58,140 68	9,871 20	.....	9,871 20
St. Patrick's Asylum, Refuge Br.	"	35,298	9,995	44,938 12	3,529 80	499 75	4,029 55
Women's Convalescent Home	"	2,956	.....	5,596 47	295 60	.....	295 60
Parry Sound Dist. House of Refuge	Powassan	8,892	.....	8,102 28	889 20	.....	889 20
Peterborough Protestant Home	Peterborough	11,647	.....	10,394 91	1,164 70	.....	1,164 70
St. Joseph's House of Providence	"	27,634	.....	10,236 97	2,763 40	.....	2,763 40
Thomas Williams Home	St. Thomas	6,123	.....	7,110 05	612 30	.....	612 30
Dist. of Algoma House of Refuge	Sault Ste. Marie	26,611	.....	16,668 77	2,661 10	.....	2,661 10
Aged Men's Home	Toronto	20,462	.....	20,467 38	2,046 20	.....	2,046 20
Aged Women's Home	"	40,862	.....	36,873 17	4,086 20	.....	4,086 20
Church Home for the Aged	"	13,481	.....	17,254 92	1,348 10	.....	1,348 10
Good Shepherd Female Refuge	"	50,693	4,438	29,874 12	5,069 30	221 90	5,291 20
Haven and Prison Gate Mission	"	25,143	10,688	29,490 26	2,514 30	534 40	3,048 70
Hillcrest Convalescent Home	"	5,847	.....	15,456 88	584 70	.....	584 70
House of Industry	"	52,208	.....	268,469 14	5,220 80	.....	5,220 80
House of Providence	"	150,979	.....	61,363 54	15,097 90	.....	15,097 90
Humewood House Association	"	4,697	5,051	10,409 24	469 70	252 55	722 25
Jewish Old Folks' Home	"	15,184	.....	13,981 91	1,518 40	.....	1,518 40
Julia Greenshields Home	"	10,571	.....	13,557 65	1,057 10	.....	1,057 10
Salvation Army Rescue Home	"	8,042	7,406	13,124 49	804 20	370 30	1,174 50
St. Mary's Convalescent Home	"	1,571	.....	.....	157 10	.....	157 10
Toronto Industrial Refuge	"	28,082	1,510	36,257 55	2,808 20	75 50	2,883 70
Victor Home for Young Women	"	8,719	4,661	12,346 78	871 90	233 05	1,104 95
Home for the Friendless	Windsor	11,562	.....	5,395 80	1,156 20	.....	1,156 20
Total		**1,148,865**	**64,529**	**1,160,492 98**	**114,886 50**	**3,226 45**	**118,112 95**

ORPHANAGES

TABLE I.

Name of Orphanage.	Location.	Number in residence Sept. 30th, 1927.	Number admitted during the year ending 30th Sept., 1928.	Total number maintained during the year.	Number discharged during the year.	Number of deaths during the year.	Number remaining in residence on 30th Sept., 1928.
St. Joseph's Orphanage	Cobourg	24	18	42	13	1	28
Nazareth Orphanage	Cornwall	40	47	87	40	.....	47
St. Joseph's Orphanage	Fort William	100	57	157	64	.....	93
Boys' Home	Hamilton	43	18	61	22	.....	39
Girls' Home	"	52	25	77	35	.....	42
Home for Friendless and Infants' Home	"	83	120	203	120	1	82
St. Mary's Orphan Asylum	"	128	70	198	86	.....	112
Salvation Army Rescue Home	"	20	115	135	104	1	30
Orphans' Home and Widows' Friend Society	Kingston	12	28	40	30	.....	10
St. Mary's of the Lake Orphanage	"	110	49	159	70	1	88
Kitchener Orphanage	Kitchener	22	28	50	28	.....	22
Protestant Orphans' Home	London	43	53	96	48	.....	48
Roman Catholic Orphans' Home	"	196	101	297	107	.....	190
Ronald Gray Memorial Home	"	30	7	37	7	.....	30
Salvation Army Rescue Home and Children's Shelter	"	55	100	155	111	.....	44
Misericordia Refuge and Orphans' Home	Ottawa	130	380	510	325	39	146
Protestant Orphans' Home	"	43	32	75	46	.....	29
Ottawa Protestant Infants' Home	"	30	74	104	63	1	40
St. Joseph's Orphanage	"	261	109	370	129	.....	241
St. Patrick's Orphan Asylum	"	47	47	94	42	.....	52
Salvation Army Rescue Home and Children's Shelter	"	101	182	283	214	1	68
St. Vincent Orphanage	Peterboro	31	41	72	36	.....	36
Loyal True Blue Orphanage	Richmond Hill	141	44	185	58	.....	127
St. Agatha Orphanage	St. Agatha	65	11	76	10	.....	66
Protestant Orphans' Home	St. Catharines	29	22	51	17	.....	34
Boys' Home	Toronto	47	33	80	35	.....	45
Infants' Home and Infirmary	"	234	464	698	430	1	267
Protestant Children's Home	"	133	115	248	93	.....	155
St. Mary's Infants' Home	"	52	156	208	138	1	69
Sacred Heart Orphanage	"	82	54	136	46	.....	90
Working Boys' Home	"	34	98	132	87	.....	45
Jewish Children's Home	"	40	18	58	9	1	48
Total	.....	**2,458**	**2,716**	**5,174**	**2,663**	**48**	**2,463**

ORPHANAGES—Continued

TABLE II.

Name of Orphanage.	Location.	Aggregate stay of inmates.	Total expenditure on maintenance account for the year ending 30th Sept., 1928.	Average cost per inmate per day.
			$ c.	$ c.
St. Joseph's Orphanage	Cobourg	9,894	4,112 32	42
Nazareth Orphanage	Cornwall	14,608	7,496 56	51
St. Joseph's Orphanage	Fort William	36,264	15,608 98	43
Boys' Home	Hamilton	14,514	9,923 53	68
Girls' Home	"	18,231	11,209 18	61
Home for Friendless and Infants' Home	"	27,061	23,770 55	87
St. Mary's Orphan Asylum	"	44,149	28,809 13	65
Salvation Army Rescue Home	"	10,926	10,586 52	96
Orphans' Home and Widows' Friend Scoiety	Kingston	4,549	8,532 77	1 87
St. Mary's of the Lake Orphanage	"	37,832	11,527 76	30
Kitchener Orphanage	Kitchener	7,866	4,894 19	62
Protestant Orphans' Home	London	16,596	10,777 72	65
Roman Catholic Orphans' Home	"	70,901	26,092 91	37
Ronald Gray Memorial Home	"	11,942	6,962 52	58
*Salvation Army Rescue Home and Children's Shelter	"	17,469	.....	.....
Misericordia Refuge and Orphans' Home	Ottawa	64,635	40,516 79	63
Protestant Orphans' Home	"	13,413	19,009 54	1 41
Ottawa Protestant Infants' Home	"	13,509	18,527 66	1 37
St. Joseph's Orphanage	"	91,394	33,739 70	37
St. Patrick's Orphan Asylum	"	19,129	35,393 12	.....
Salvation Army Rescue Home and Children's Shelter	"	20,964	18,883 57	90
St. Vincent Orphanage	Peterboro	11,993	6,186 60	51
Loyal True Blue Orphanage	Richmond Hill	52,061	.....	.....
St. Agatha Orphanage	St. Agatha	24,851	6,914 87	27
Protestant Orphans' Home	St. Catharines	11,038	7,430 03	67
Boys' Home	Toronto	8,729	19,001 44	2 18
Infants' Home and Infirmary	"	44,646	.....	.....
Protestant Children's Home	"	24,118	57,045 16	2 36
St. Mary's Infants' Home	"	10,210	20,356 25	1 99
Sacred Heart Orphanage	"	30,206	18,311 32	61
Working Boys' Home	"	14,868	13,295 54	89
Jewish Children's Home	"	15,405	13,734 22	89
Total	.....	**813,971**	**508,650.45**	**62**

*Financial return included in Hospital report.

ORPHANAGES—Continued

TABLE III.

Name of Orphanage.	Location.	Collective days' stay at Orphanage rate.	Collective days' stay at Refuge rate.	Amount received from all sources other than Government.	Amount earned at 5 cents Orphanage rate.	Amount earned at 10 cents Refuge rate.	Total Government grant for 1928.
				$ c.	$ c.	$ c.	$ c.
St. Joseph's Orphanage	Cobourg	9,894	.....	3,710 63	494 70	.....	494 70
Nazareth Orphanage	Cornwall	14,275	333	69,195 36	713 75	33 30	747 05
St. Joseph's Orphanage	Fort William	36,264	.....	18,037 28	1,813 20	.....	1,813 20
Boys' Home	Hamilton	14,514	.....	9,134 88	725 70	.....	725 70
Girls' Home	"	18,231	.....	10,291 28	911 55	.....	911 55
Home for Friendless and Infants' Home	"	20,459	6,602	24,115 96	1,022 95	660 20	1,683 15
St. Mary's Orphan Asylum	"	41,851	2,298	31,233 58	2,092 55	229 80	2,322 35
Salvation Army Rescue Home	"	4,875	6,051	12,163 63	243 75	605 10	848 85
Orphans' Home and Widows' Friend Society	Kingston	4,549	.....	9,278 22	227 45	.....	227 45
St. Mary's of the Lake Orphanage	"	37,146	686	9,584 28	1,857 30	68 60	1,925 90
Kitchener Orphanage	Kitchener	7,866	.....	6,695 33	393 30	.....	393 30
Protestant Orphans' Home	London	16,596	.....	16,707 19	829 80	.....	829 80
Roman Catholic Orphans' Home	"	70,901	.....	22,898 58	3,545 05	.....	3,545 05
Ronald Gray Memorial Home	"	11,942	.....	6,799 74	597 10	.....	597 10
Salvation Army Rescue Home and Children's Shelter	"	11,381	6,088	.....	569 05	608 80	1,177 85
Misericordia Refuge and Orphans' Home	Ottawa	30,522	24,113	96,540 07	1,526 10	2,411 30	3,937 40
Protestant Orphans' Home	"	13,413	.....	32,365 93	670 65	.....	670 65
Ottawa Protestant Infants' Home	"	13,509	.....	22,160 47	675 45	.....	675 45
St. Joseph's Orphanage	"	88,776	2,618	29,969 45	4,438 80	261 80	4,700 60
St. Patrick's Orphan Asylum	"	9,129	.....	44,938 12	956 45	.....	956 45
Salvation Army Rescue Home and Children's Shelter	"	10,710	10,254	12,165 17	535 50	1,025 40	1,560 90
St. Vincent Orphanage	Peterboro	11,993	.....	5,671 15	599 65	.....	599 65
Loyal True Blue Orphanage	Richmond Hill	52,061	.....	.....	2,603 05	.....	2,603 05
St. Agatha Orphanage	St. Agatha	24,851	.....	5,948 10	1,242 55	.....	1,242 55
Protestant Orphans' Home	St. Catharines	1,038	.....	13,924 77	551 90	.....	551 90
Boys' Home	Toronto	8,729	.....	18,398 05	436 45	.....	436 45
Infants' Home and Infirmary	"	44,646	.....	.....	2,232 30	.....	2,232 30
Protestant Children's Home	"	24,118	.....	54,619 76	1,205 90	.....	1,205 90
St. Mary's Infants' Home	"	6,388	3,822	21,682 94	319 40	382 20	701 60
Sacred Heart Orphanage	"	29,843	363	18,608 95	1,492 15	36 30	1,528 45
Working Boys' Home	"	12,080	2,788	12,852 27	604 00	278 80	882 80
Jewish Children's Home	"	15,405	.....	13,247 49	770 25	.....	770 25
Total	.....	737,955	66,016	592,938 63	36,897 75	6,601 60	43,499 35

COUNTY HOUSES OF REFUGE

County	Approximate value of Buildings	Approximate value of Contents	Approximate value of Land	Number of Acres	Average number of Inmates	Receipts		County Treasurer	Expenditures	Average weekly cost per Inmate
						Profits of Farm	Other Sources		Cost of Maintenance	
	$ c.	$ c.	$ c.			$ c.	$ c.	$ c.	$ c.	$ c.
Brant	150,000 00	3,000 00	4,000 00	40	97	1,051 35	370 95	18,230 37	17,680 37	3 40
Bruce	55,000 00	5,000 00	5,000 00	62	48	300 00	556 42	10,526 90	11,183 32	4 48
Elgin	38,393 00	2,500 00	7,298 00	100	41	1,642 82	.....	9,973 39	9,642 27	4 15
Essex	37,750 00	5,000 00	19,500 00	65	41	6,864 97	.....	10,150 16	10,150 16	1 49
Grey	70,500 00	7,770 00	5,000 00	94	71	1,652 55	1,602 39	9,044 00	12,298 94	3 33
Haldimand	23,000 00	10,000 00	5,000 00	50	32	1,525 00	1,059 16	9,660 01	9,702 60	3 45
Hastings	75,000 00	6,000 00	20,000 00	75	83	1,996 93	1,907 21	10,367 10	14,271 24	2 86
Huron	75,000 00	950 00	7,000 00	69	92	1,755 31	1,990 54	9,756 61	13,502 16	1 77
Kent	40,000 00	2,500 00	7,500 00	50	47	821 64	.....	8,017 31	8,538 95	3 28
Lambton	100,000 00	3,925 00	15,000 00	60	40	703 64	477 00	13,104 52	14,285 16	4 22
Lanark	37,949 29	6,724 10	5,000 00	75	83	2,059 88	13,089 99	1,670 77	16,820 64	3 85
Leeds and Grenville	30,000 00	1,500 00	5,000 00	100	42	1,502 92	1,375 00	6,300 00	9,176 92	4 00
Lincoln	50,000 00	6,125 40	2,100 00	70	51	2,939 43	2,976 81	10,382 87	17,542 91	6 50
Middlesex	50,000 00	10,000 00	15,000 00	110	80	3,500 00	3,280 00	22,114 00	21,364 40	5 10
Norfolk	54,220 00	6,282 00	5,010 00	102	58	706 62	.....	13,418 76	14,123 38	4 44
Northumberland and Durham	60,000 00	2,000 00	7,000 00	80	50	3,167 60	1,339 13	16,200 29	.....	4 97
Ontario	50,000 00	7,000 00	5,200 00	52	59	3,262 00	1,242 18	14,315 14	9,810 96	4 66
Oxford	60,000 00	10,000 00	5,000 00	100	65	1,525 00	2,407 00	.....	12,094 37	3 58
Peel and Halton	60,600 00	8,000 00	5,000 00	50	74	.....	1,940 22	13,714 56	12,314 00	2 78
Perth	50,000 00	3,000 00	5,000 00	53	62	550 37	1,392 00	6,317 41	8,259 78	2 85
Peterborough	25,250 00	2,500 00	5,250 00	96	37	389 10	.....	8,019 18	7,410 40	5 64
Prescott and Russell	17,600 00	11,500 00	2,800 00	100	65	2,480 15	667 22	25,494 28	26,161 50	4 32
Prince Edward	25,000 00	5,000 00	3,000 00	45	47	2,500 00	1,500 00	4,700 00	8,700 00	2 07
Simcoe	45,000 00	11,000 00	3,200 00	100	88	.....	2,528 00	19,684 90	22,192 90	1 60
Stormont, Dundas and Glengarry	50,000 00	7,000 00	7,000 00	140	86	580 36	1,626 02	14,954 55	16,050 40	3 09
Victoria	64,500 00	12,561 05	8,344 77	65	82	904 03	2,057 53	12,987 00	15,948 56	3 74
Waterloo	175,000 00	5,000 00	2,200 00	108	127	.....	2,033 11	550 00	35,000 00	4 96
Welland	35,000 00	8,000 00	6,000 00	60	76	956 90	6,859 38	21,323 22	21,323 22	3 47
Wellington	80,000 00	6,000 00	5,000 00	58	67	400 00	4,509 45	3,900 00	11,969 85	3 44
Wentworth	40,000 00	6,000 00	14,000 00	188	53	.....	4,286 18	10,996 04	10,996 04	3 92
York	15,000 00	5,000 00	1,400 00	140	95	1,800 00	620 00	19,600 00	6,609 00	1 33

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Sixty-First Annual Report

OF THE

Inspector of Prisons and Public Charities

UPON THE

Prisons and Reformatories

OF THE

PROVINCE OF ONTARIO

BEING FOR THE YEAR ENDING 31st OCTOBER

1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 18, 1929

ONTARIO

TORONTO:
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1929

INTRODUCTION

I have the honour of submitting herewith the Sixty-first Annual Report upon the Prisons and Reformatories of the Province of Ontario, for the fiscal year ending 30th of September, 1928. I also present the report of the Ontario Board of Parole for the year ending October 31st, 1928.

As the Report upon the Prisons and Reformatories is comprised of tables giving full statistical information and is prefaced by table of selected information of special interest, it would appear unnecessary to make further comment in an introductory way.

H. M. Robbins,
Deputy Provincial Secretary.

Sixty-first Annual Report

UPON THE

Gaols in Ontario

The following statistics have been selected from the ensuing tables as being of special interest:—

(1) Number of gaols in Ontario 47

(2) Total expenditure for gaol maintenance in Ontario:

In 1927	$331,091 25
In 1928	387,621 21
Increase	$56,529 96

Thirty-six out of the total number of 47 gaols showed an increase in expenditure over the previous year.

(3) The cash revenue from gaol labour during 1928 was $2,862.65 and was earned at Kingston and Ottawa.

Average maintenance cost per day per prisoner	47 cents
Average dietary cost per day per prisoner	17 cents

(4) Number of persons committed during the past two years:

In 1927	20,578
In 1928	23,786
Increase	3,208
Commitments for murder in 1927	18
Commitments for murder in 1928	37
Increase	19
Commitments for manslaughter in ,1927	49
Commitments for manslaughter in 1928	40
Decrease	9

Commitments for crime against the person:

In 1927	728
In 1928	786
Increase	58

Commitments for crime against property:

In 1927	4,976
In 1928	5,427
Increase	451

Commitments for crime against public morals and decency:

In 1927	595
In 1928	701
Increase	106

Commitments for crime against public order and peace:

In 1927	11,174
In 1928	14,735
Increase	3,561

Commitments for insanity:

In 1927	273
In 1928	341
Increase	68

Prisoners sentenced to the penitentiary during the past year show a decrease of 40, as compared with the previous year, while the number transferred to the reformatories was 609 more than in 1927.

Number of prisoners sentenced in 1927	13,927
Number of prisoners sentenced in 1928	16,358
Increase	2,431

Number of days' stay of prisoners:

In 1927	283,205
In 1928	390,891
Increase	107,686

Escapes and captures:

	Escaped	Captured
In 1927	18	9
In 1928	17	11

Deaths in gaols:

In 1927	10
In 1928	19

COMMON GAOLS

The following table shows the number of prisoners committed to the Common Gaols in the Province in each year, from 1st October, 1913, to 30th September, 1928.

Date of Commitment	Men over 16 years of age.	Boys under 16 years of age.	Women over 16 years of age.	Girls under 16 years of age.	Totals.
Commitments for the year ending 30th September, 1913	17,442	85	1,713	10	19,250
" " " 1914	21,024	84	1,665	4	22,777
" " " 1915	18,566	90	1,669	12	20,337
" " " 1916	14,506	80	1,502	12	16,100
" " " 1917	11,417	142	878	8	12,445
" " " 1918	12,182	136	914	10	13,242
" " " 1919	12,034	183	872	7	13,096
" " " 1920	13,759	106	882	9	14,756
" " " 1921	16,526	93	1,168	13	16,800
" " " 1922	13,360	126	1,300	14	14,800
" " " 1923	12,766	80	1,135	14	13,995
" " " 1924	14,564	78	1,211	26	15,879
" " " 1925	16,343	98	1,567	15	18,023
" " " 1926	16,502	62	1,460	9	18,033
" " " 1927	19,564	110	884	20	20,578
" " " 1928	22,047	89	1,638	12	23,786

The disposition made of the persons committed to the Gaols of the Province is set forth in the table printed below:

	1927	1928
Acquitted on being brought to trial, and discharged	2,538	2,735
Discharged without trial by order of judges, magistrates and courts, including remand cases	1,554	2,147
Detained for want of sureties to keep the peace	14	7
Detained as witnesses	37	41
Detained as fraudulent debtors	135	91
Detained as lunatics, idiots and persons unsafe to be at large	335	335
Died before trial	12	3
Detained by civil processes other than above	270	122
Waiting trial and otherwise detained on 30th September, 1927	188	291
Found guilty and sentenced	13,927	16,358
Discharged under suspended sentence	1,568	1,656
Total number of commitments	20,578	23,786

The places of confinement to which the convicted persons were sentenced are set forth in the following statement, and similar information is given as regards the sentenced prisoners of the previous year:

	1927	1928
Sentenced to Kingston Penitentiary	391	351
" to the Industrial School	33	32
" direct to the Ontario Reformatory	2,278	3,046
" to the Common Gaols and subsequently transferred to the Ontario Reformatory	4,082	3,897
" direct to the Reformatory for Females	167	191
" to the Common Gaols and subsequently transferred to the Reformatory for Females	97	99
" to the Common Gaols and there detained until the expiration of sentence	6,731	8,678
Died while undergoing sentence	10	9
Sentenced elsewhere	138	55
Totals	13,927	16,358

The following table shows the period of sentence passed on the convicted prisoners:

PERIODS OF SENTENCE

	1927	1928
For periods under thirty days	4,523	5,439
For thirty days and up to sixty days or two months, not including the last term	3,772	4,306
For sixty days, or two months	1,139	1,602
Over two months to three months	1,138	1,456
Over three months to four months	277	530
Over four months to five months	84	149
Over five months to six months	659	833
Over six months to nine months	187	200
Over nine months up to one year, inclusive	421	441
Over one year and up to two years	916	923
Over two years and up to three years in the Penitentiary	219	194
Over three years in the Penitentiary	148	129
For periods of any length in the Industrial Schools	404	301
Sentenced to death and executed	2	1
Sentenced to death and commuted to imprisonment	1	1
Sentenced to imprisonment with corporal punishment	37	45
	13,927	16,358

The following table shows the sex, social conditions, habits, and educational status of all prisoners committed:

SEX

	1927	1928
Male	19,084	22,097
Female	1,494	1,689
	20,578	23,786

SOCIAL CONDITIONS

Married	7,798	9,102
Unmarried	12,780	14,684
	20,578	23,786

HABITS

Temperate	8,139	9,091
Intemperate	12,439	14,695
	20,578	23,786

EDUCATIONAL STATUS

Could read and write	18,298	21,714
Could neither read nor write	2,280	2,072
	20,578	23,786

The following table shows the nationality and religion of all prisoners committed.

NATIONALITY

	1027	1928
Canadian-born	10,981	13,620
English	1,894	1,799
Irish	765	928
Scotch	893	996
United States	1,077	1,188
Other countries	4,978	5,255
	20,578	23,786

RELIGIOUS DENOMINATIONS

	1927	1928
Roman Catholic	8,626	9,763
English Church	3,627	3,731
Presbyterian	2,479	2,766
United	2,346	2,804
Other denominations	3,860	4,722
	20,578	23,786

The number of prisoners confined in the various custodial institutions of the Province at the close of the past official year, and the year preceding, is exhibited in the following summary:

	1927	1928
In the Common Gaols	800	1,013
In the Reformatory for Females (Mercer), Toronto	181	188
In the Dominion Penitentiary, Kingston	657	770
In the Industrial Farm, Burwash	320	312
In the Industrial Farm, Fort William	56	81
In the Industrial Farm, Langstaff (for Men)	311	290
In the Industrial Farm, Concord (for Women)	34	207
In the Ontario Reformatory Clay Plant, Mimico	118	145
In the Ontario Reformatory, Guelph	507	535
	2,984	3,541

The following is a classification of the offences committed and shows the number of persons committed and sentenced:

I. CRIMES AGAINST THE PERSON

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Abortion	10	4	14	6	2	8
Assault, common	416	14	430	302	7	309
Assault, felonious	114	8	122	71	2	73
Cutting and wounding, stabbing and shooting with intent	33	1	34	18	1	19
Rape and assault with intent	77	.....	77	38	.....	38
Murder	34	3	37	8	.....	8
Manslaughter	38	2	40	7	1	8
Attempted suicide	28	4	32	19	1	20
	750	36	786	469	14	483

II. CRIMES AGAINST PROPERTY

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Arson and incendiarism	36	8	44	14	2	16
Burglary	371	17	388	215	3	218
Counterfeiting and passing counterfeit money	3	.....	3	3	.....	3
Destroying and injuring property	75	2	77	55	1	56
Embezzlement	9	1	10	7	1	8
Forgery	146	14	160	93	8	101
Fraud and obtaining money and goods under false pretences	506	37	543	331	22	353
Horse, cattle and sheep stealing	13	.....	13	8	.....	8
Housebreaking and robbery	350	29	379	296	15	311
Larceny	2,854	144	2,998	1,825	74	1,899
Receiving stolen goods	105	25	130	62	13	75
Trespass	679	3	682	615	1	616
	5,147	280	5,427	3,524	140	3,664

III. CRIMES AGAINST PUBLIC MORALS AND DECENCY

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Bigamy	15	10	25	11	5	16
Inmates and frequenters of houses of ill-fame	118	57	175	87	51	138
Keeping houses of ill-fame	77	100	177	58	43	101
Perjury	30	6	36	20	2	22
Seduction	51	.....	51	19	.....	19
Indecent assault and exposure	201	3	204	103	.....	103
Prostitution	.....	33	33	.....	27	27
	492	209	701	298	128	426

IV. OFFENCES AGAINST PUBLIC ORDER AND PEACE

	Total commitments for the year			Number found guilty and sentenced		
	Male	Female	Total	Male	Female	Total
Abusive and obscene language	38	1	39	11	.....	11
Breaches of peace, breaches of by-laws, escapes from and obstructing constables	554	49	603	233	18	251
Carrying unlawful weapons	76	5	81	42	.....	42
Deserting employment, etc	2	1	3	2	.....	2
Drunk and disorderly	4,582	187	4,769	3,804	162	3,966
Deserting the militia	2	.....	2	.....	.....	.....
Selling liquor without a license and selling or giving it to Indians	4,603	246	4,849	3,542	188	3,730
Threatening and seditious language	27	3	30	14	2	16
Vagrancy	3,416	401	3,817	2,151	159	2,310
Contempt of court	199	2	201	186	2	188
Lunatics	282	59	341	.....	.....	.....
	13,781	954	14,735	9,985	531	10,516
Other offences not classified above	1,927	210	2,137	1,198	71	1,269
Grand Totals	22,097	1,689	23,786	15,474	884	16,358

TABLE No. 1

Offences for which prisoners were committed to gaol during the year showing commitments and sentences under each offence.

	Showing the Number Committed			Number Sentenced			Percentage of sentences to commitments
	Males	Females	Total	Males	Females	Total	
Abortion	10	4	14	6	2	8	.57
Abusive and obscene language	38	1	39	11	.....	11	.28
Arson	24	5	29	11	2	13	.45
Assault	416	14	430	302	7	309	.72
Assault, felonious	114	8	122	71	2	73	.59
Attempted suicide	28	4	32	19	1	20	.63
Abduction	14	2	16	7	2	9	.59
Bigamy	15	10	25	11	5	16	.64
Breaches of the peace	154	9	163	37	3	40	.24
Breaches of by-laws	352	37	389	164	14	178	.46
Burglary	371	17	388	215	3	218	.56
Carrying unlawful weapons	76	5	81	42	.....	42	.50
Contempt of court	199	2	201	186	2	188	.93
Cruelty to animals	12	2	14	9	2	11	.78
Counterfeiting and passing counterfeit money	3	.....	3	3	.....	3	100
Cutting and wounding and attempting same	13	.....	13	8	.....	8	.61
Debtors	32	3	35	.....	.....	.....	.....
Deserting employment	2	1	3	2	.....	2	.66
Deserting the militia	2	.....	2	.....	.....	.....	.....
Destroying and injuring property	75	2	77	55	1	56	.73
Detained as witnesses	65	2	67	.....	.....	.....	.....
Drunk and disorderly (not including breaches of Liquor Act)	4,582	187	4,769	3,804	162	3,966	83
Embezzelement	9	1	10	7	1	8	.80
Escaping from or obstructing constable	48	3	51	32	1	33	.65
Escaping from prison	30	1	31	20	6	26	.84
Forgery	146	14	160	93	8	101	.63
Fraud and obtaining money or goods under false pretences	506	37	543	331	22	353	.65
Gambling	101	1	102	57	.....	57	.56
Giving liquor to Indians (not to include ordinary Breach of Liquor Act)	20	1	21	18	1	19	.91
Horse, cattle or sheep stealing	13	.....	13	8	.....	8	.61
Housebreaking and robbery	350	29	379	296	15	311	.82
Incendiarism	12	3	15	3	.....	3	.20
Indecent assault and exposure	201	3	204	103	.....	103	.50
Inmates and frequenters of houses of ill-fame	118	57	175	87	51	138	.78
Keeping houses of ill-fame	77	100	177	58	43	101	.57
Larceny	2,854	144	2,998	1,825	74	1,899	.64
Lunatics and persons who were unsafe to be at large	282	59	341	.....	.....	.....	.....
Manslaughter	38	2	40	7	1	8	.20
Misdemeanour	66	15	81	40	9	49	.60
Murder	34	3	37	8	0	8	.22
Perjury	30	6	36	20	2	22	.61
Prostitution	.....	33	33	.....	27	27	.82
Total	11,532	827	12,359	7,976	469	8,445	.....

TABLE No. 1—*Continued*

	Showing the Number Committed			Number Sentenced			Percentage of sentences to commitments
	Males	Females	Total	Males	Females	Total	
Total forward	11,532	827	12,359	7,976	469	8,445	.....
Rape and assault with intent	77	.....	77	38	.....	38	.49
Refusing bail	.....	.....	.....	.....	.....	.....	.....
Receiving stolen goods	105	25	130	62	13	75	.58
Seduction	51	.....	51	19	.....	19	.37
Selling liquor without license or Breach of Liquor Act	4,583	245	4,828	3,524	187	3,711	.77
Shooting with intent	13	.....	13	6	.....	6	.46
Stabbing	7	1	8	4	1	5	.63
Threatening and seditious language	27	3	30	14	2	16	.53
Trespass	679	3	682	615	1	616	.90
Unlawful shooting	.....	1	1	.....	.....	.....	.....
Vagrancy	3,416	401	3,817	2,151	159	2,310	.61
Want of sureties to keep the peace	26	2	28	.....	.....	.....	.....
Other offences not above enumerated	1,581	181	1,762	1,065	52	1,117	.64
Total	22,097	1,689	23,786	15,474	884	16,358	.67 Average

TABLE No. 2

Showing the social status and habits of prisoners committed during the year ending 30th September, 1928

Name of Gaol	Married	Un-married	Temperate	In-temperate	Total committed to gaol	Illiterate
Barrie	75	113	121	67	188	20
Belleville	136	220	237	119	356	40
Bracebridge	26	35	48	13	61	4
Brampton	34	55	34	55	89	..
Brantford	110	144	75	179	254	2
Brockville	67	92	60	99	159	12
Cayuga	53	122	63	112	175	13
Chatham	181	293	306	168	474	39
Cobourg	52	91	87	56	143	12
Cornwall	108	125	50	183	233	71
Fort Frances	81	152	93	140	233	18
Goderich	26	63	58	31	89	8
Gore Bay	9	10	9	10	19	10
Guelph	51	101	116	36	152	..
Haileybury	151	263	203	211	414	47
Hamilton	519	586	294	811	1,105	43
Kenora	27	109	133	3	136	36
Kingston	99	141	67	173	240	1
Kitchener	116	168	137	147	284	3
Lindsay	39	63	47	55	102	10
London	371	554	339	586	925	16
L'Orignal	33	16	48	1	49	7
Milton	53	164	136	81	217	5
Napanee	27	48	54	21	75	3
North Bay	468	107	210	365	575	91
Orangeville	25	44	48	21	69	..
Ottawa	429	632	461	600	1,061	104
Owen Sound	97	75	81	91	172	10
Parry Sound	76	134	101	109	210	24
Pembroke	23	83	36	70	106	17
Perth	75	113	86	102	188	17
Peterborough	89	138	200	27	227	10
Picton	40	54	17	77	94	4
Port Arthur	254	878	470	662	1,132	85
St. Catharines	171	182	72	281	353	22
St. Thomas	103	139	228	14	242	22
Sandwich	782	605	516	871	1,387	94
Sarnia	131	205	80	256	336	40
Sault Ste. Marie	137	242	103	276	379	68
Simcoe	62	61	34	89	123	..
Stratford	61	76	86	51	137	9
Sudbury	330	1,169	102	1,397	1,499	50
Toronto	2,815	5,270	2,812	5,273	8,085	912
Walkerton	45	60	55	50	105	9
Welland	198	332	200	330	530	59
Whitby	171	230	173	228	401	..
Woodstock	76	127	105	98	203	5
Totals	9,102	14,684	9,091	14,695	23,786	2,072

TABLE

Showing the number of persons committed, the number over and under sixteen years of age, unsound mind, number acquitted on trial, number discharged without trial, number

Name of gaol	Total number committed during the year			Number under 16 years of age			Number over 16 years of age			For the first time	For the second time
	Male	Female	Total	Male	Female	Total	Male	Female	Total		
Barrie	176	12	188	.....	1	1	176	11	187	128	44
Belleville	339	17	356	1	.....	1	338	17	355	278	48
Bracebridge	55	6	61	1	.....	1	54	6	60	43	12
Brampton	87	2	89	.....	.....	.....	87	2	89	61	13
Brantford	245	9	254	.....	.....	.....	245	9	254	151	41
Brockville	157	2	159	2	.....	2	155	2	157	107	37
Cayuga	173	2	175	.....	.....	.....	173	2	175	116	24
Chatham	445	29	474	1	.....	1	444	29	473	277	99
Cobourg	134	9	143	2	1	3	132	8	140	108	22
Cornwall	226	7	233	3	.....	3	223	7	230	133	43
Fort Frances	216	17	233	3	.....	3	213	17	230	196	20
Goderich	88	1	89	.....	.....	.....	88	1	89	68	11
Gore Bay	17	2	19	.....	.....	.....	17	2	19	13	4
Guelph	148	4	152	.....	.....	.....	148	4	152	97	32
Haileybury	387	27	414	.....	.....	.....	387	27	414	308	69
Hamilton	991	114	1,105	10	.....	10	981	114	1,095	604	174
Kenora	128	8	136	2	.....	2	126	8	134	69	67
Kingston	232	8	240	1	.....	1	231	8	239	164	29
Kitchener	267	17	284	3	1	4	264	16	280	184	66
Lindsay	94	8	102	1	.....	1	93	8	101	74	17
London	822	103	925	14	1	15	808	102	910	602	162
L'Orignal	43	6	49	.....	.....	.....	43	6	49	38	11
Milton	214	3	217	.....	.....	.....	214	3	217	75	33
Napanee	71	4	75	2	.....	2	69	4	73	72	2
North Bay	558	17	575	.....	.....	.....	558	17	575	376	94
Orangeville	66	3	69	1	.....	1	65	3	68	57	12
Ottawa	967	94	1,061	6	.....	6	961	94	1,055	988	51
Owen Sound	162	10	172	.....	.....	.....	162	10	172	77	29
Parry Sound	200	10	210	.....	2	2	200	8	208	192	18
Pembroke	103	3	106	.....	.....	.....	103	3	106	103	3
Perth	182	6	188	.....	.....	.....	182	6	188	168	4
Peterborough	190	37	227	1	.....	1	189	37	226	155	54
Picton	85	9	94	1	.....	1	84	9	93	71	14
Port Arthur	1,088	44	1,132	3	.....	3	1,085	44	1,129	901	148
St. Catharines	336	17	353	.....	.....	.....	336	17	353	185	52
St. Thomas	228	14	242	2	.....	2	226	14	240	141	55
Sandwich	1,291	96	1,387	.....	.....	.....	1,291	96	1,387	1,233	46
Sarnia	315	21	336	7	2	9	308	19	327	223	77
SaultSte.Marie	337	42	379	4	2	6	333	40	373	248	85
Simcoe	120	3	123	5	.....	5	115	3	118	88	22
Stratford	134	3	137	.....	.....	.....	134	3	137	79	36
Sudbury	1,412	87	1,499	.....	.....	.....	1,412	87	1,499	1,274	66
Toronto	7,455	630	8,085	12	2	14	7,443	628	8,071	3,395	2,499
Walkerton	100	5	105	1	.....	1	99	5	104	90	8
Welland	501	29	530	.....	.....	.....	501	29	530	376	94
Whitby	361	40	401	.....	.....	.....	361	40	401	266	71
Woodstock	190	13	203	.....	.....	.....	190	13	203	196	5
Totals	22,136	1,650	23,786	89	12	101	22,047	1,638	23,685	14,848	4,623

No. 3.

the number of re-committals, the number for want of sureties to keep the peace, number of waiting trial, number sentenced, and number committed under civil process.

For the third time	For more than the third time	For want of sureties to keep the peace	Witnesses	Lunatics and idiots	Fraudulent debtors	Under civil process	Acquitted on trial and discharged	Discharged without trial	Discharged under suspended sentence	Died before trial	Waiting trial	Sentenced for any period
9	7	2	5	10	9	10	12	1	13	.....	9	117
21	9	.....	3	1	.....	.....	141	.....	1	.....	3	207
5	1	.....	.....	3	.....	.....	5	5	3	.....	3	42
8	7	.....	.....	2	.....	.....	12	.....	21	.....	3	51
19	43	.....	3	4	.....	.....	61	.....	6	.....	1	179
6	9	.....	.....	7	.....	2	8	4	12	.....	10	116
12	23	.....	.....	5	.....	.....	8	.....	5	.....	3	154
60	38	.....	.....	8	1	.....	74	.....	74	.....	9	308
8	5	.....	1	7	.....	19	14	.....	23	.....	4	75
23	34	3	.....	2	7	.....	32	.....	6	.....	3	180
15	2	.....	4	14	.....	.....	13	41	23	1	3	134
4	6	.....	.....	7	1	.....	6	.....	5	.....	2	68
2	.....	.....	.....	1	.....	.....	2	.....	1	.....	.....	15
17	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	151
16	21	.....	2	36	1	4	12	9	2	.....	1	347
69	258	.....	8	1	.....	.....	5	199	38	.....	13	841
.....	.....	.....	.....	4	.....	.....	20	4	2	.....	6	100
17	30	.....	4	1	.....	.....	7	6	5	.....	41	176
17	17	.....	.....	6	.....	.....	1	77	15	.....	2	183
6	5	1	.....	6	.....	1	5	5	16	.....	5	63
49	112	.....	.....	19	.....	.....	404	.....	3	.....	.....	499
.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	1	46
13	96	.....	.....	.....	.....	54	3	.....	14	.....	3	143
1	.....	.....	.....	.....	.....	.....	9	.....	15	.....	3	48
43	62	.....	.....	8	4	.....	71	.....	.....	.....	3	489
.....	.....	.....	.....	2	.....	24	3	2	5	.....	.....	33
14	8	.....	.....	.....	.....	.....	.....	385	39	.....	11	626
13	53	.....	.....	1	1	1	26	3	3	.....	5	132
.....	.....	.....	.....	4	.....	.....	52	18	15	.....	1	120
.....	.....	.....	.....	1	.....	.....	1	.....	1	.....	.....	103
6	10	.....	.....	.....	.....	.....	59	.....	3	.....	1	125
7	11	.....	.....	4	.....	.....	49	35	25	.....	3	111
8	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	94
83	.....	.....	.....	51	.....	.....	41	3	13	.....	3	1,021
24	92	.....	.....	1	.....	.....	28	.....	7	.....	8	309
31	15	.....	.....	4	5	.....	43	55	33	.....	3	99
18	90	.....	.....	20	45	.....	371	.....	58	.....	23	870
24	12	.....	.....	3	3	3	13	94	3	.....	2	215
21	25	.....	.....	18	.....	.....	.....	77	.....	.....	8	276
6	7	.....	.....	6	1	.....	8	15	18	.....	7	68
13	9	.....	.....	2	.....	.....	11	38	10	.....	5	71
17	142	.....	2	7	1	.....	52	13	20	.....	.....	1,404
1,120	1,071	.....	4	38	3	4	979	1,031	898	2	68	5,062
6	1	.....	.....	10	.....	.....	42	.....	6	.....	5	42
34	26	1	2	1	1	.....	1	.....	142	.....	5	377
44	20	.....	.....	3	8	.....	18	.....	23	.....	.....	349
2	.....	.....	3	5	.....	.....	13	27	29	.....	1	125
1,931	2,384	7	41	335	91	122	2,735	2,147	1,656	3	291	16,358

TABLE

Showing the number of prisoners upon whom sentences were passed, the nature of such
Criminal Court during the

Name of Gaol	Total number of prisoners sentenced during the year			Where sentenced to					
	Male	Female	Total	To gaol and later to the Reformatory	To Reformatory direct	To gaol and later to female Reformatory	To female Reformatory direct	To Penitentiary	Sentenced elsewhere
Barrie	107	10	117	6	16	.....	1	5	8
Belleville	202	5	207	7	40	.....	2	6	2
Bracebridge	39	3	42	.....	3	.....	2	4	.....
Brampton	51	....	51	.....	10	.....	.....	1	1
Brantford	175	4	179	22	11	.....	2	8	.....
Brockville	115	1	116	25	1	.....	.....	2	.....
Cayuga	152	2	154	.....	5	.....	1	.....	1
Chatham	294	14	308	6	39	1	.....	10	.....
Cobourg	71	4	75	3	9	.....	1	2	.....
Cornwall	174	6	180	50	7	.....	.....	9	.....
Fort Frances	129	5	134	.....	3	.....	1	3	1
Goderich	67	1	68	.....	10	.....	1	2	.....
Gore Bay	13	2	15	.....	4	.....	1	1	.....
Guelph	147	4	151	.....	20	.....	4	10	.....
Haileybury	330	17	347	39	2	2	2	6	.....
Hamilton	767	74	841	61	227	3	19	33	.....
Kenora	94	6	100	9	.....	.....	.....	3	.....
Kingston	172	4	176	9	6	.....	21	3	.....
Kitchener	174	9	183	4	37	.....	3	2	5
Lindsay	61	2	63	3	9	.....	2	3	.....
London	469	30	499	45	.....	7	.....	23	6
L'Orignal	41	5	46	2	.....	.....	1	.....	.....
Milton	140	3	143	1	12	.....	.....	11	.....
Napanee	47	1	48	.....	8	.....	.....	1	7
North Bay	482	7	489	14	67	.....	1	4	1
Orangeville	32	1	33	.....	9	.....	.....	2	.....
Ottawa	585	41	626	6	49	.....	13	14	1
Owen Sound	128	4	132	3	9	.....	2	1	.....
Parry Sound	116	4	120	.....	38	.....	2	2	2
Pembroke	100	3	103	7	.....	.....	.....	2	3
Perth	122	3	125	1	10	.....	.....	3	.....
Peterborough	104	7	111	1	19	.....	3	11	4
Picton	85	9	94	.....	3	.....	.....	4	.....
Port Arthur	996	25	1,021	.....	748	.....	2	11	.....
St. Catharines	292	17	309	39	.....	.....	.....	7	.....
St. Thomas	92	7	99	.....	24	4	.....	4	.....
Sandwich	827	43	870	.....	77	.....	25	16	.....
Sarnia	200	15	215	.....	27	.....	7	9	.....
Sault Ste. Marie	247	29	276	24	.....	.....	9	4	.....
Simcoe	67	1	68	.....	6	.....	.....	2	.....
Stratford	70	1	71	1	12	.....	1	2	4
Sudbury	1,345	59	1,404	683	.....	3	.....	17	.....
Toronto	4,704	358	5,062	2,746	1,387	72	60	63	2
Walkerton	40	2	42	1	4	.....	.....	1	.....
Welland	366	11	377	10	69	.....	1	8	.....
Whitby	320	29	349	66	.....	7	.....	5	7
Woodstock	123	2	125	3	9	.....	1	11	.....
Totals	15,474	884	16,358	3,897	3,046	99	191	351	55

No. 4

sentences, and the disposal of those who elected to be tried at the County Judge's year ending September 30th, 1928.

			Capital and corporal sentences			County Judge's Criminal Court		
To industrial school or refuge.	Died while undergoing sentence	To gaol until expiration of sentence or payment of fine	Number sentenced to death and executed	Number sentenced to death and commuted to imprisonment	Number sentenced to corporal punishment and imprisonment	Acquitted on trial and discharged	Found guilty and sentenced	Total number who elected to be tried
.....	.....	81	.....	.....	.....	1	5	6
1	1	148	.....	.....	.....	.....	6	6
.....	.....	33	.....	.....	1	1	1	2
1	.....	38	.....	.....	.....	1	2	3
.....	.....	136	.....	.....	.....	1	5	6
.....	.....	88	.....	.....	.....	2	9	11
.....	.....	147	.....	.....	.....	2	8	10
2	.....	250	.....	.....	2	1	9	10
.....	.....	60	.....	.....	.....	2	19	21
3	.....	111	.....	.....	.....	1	3	4
.....	1	125	.....	.....	.....	1	2	3
2	.....	53	.....	.....	.....	.....	2	2
.....	.....	9	.....	1	.....	2	2	4
.....	.....	117	.....	.....	.....	.....	10	10
.....	.....	296	.....	.....	1	1	13	14
7	.....	491	.....	.....	.....	5	92	97
.....	.....	88	.....	.....	1	1	1	2
.....	.....	137	.....	.....	.....	4	5	9
3	.....	129	.....	.....	1	1	.....	1
1	.....	45	.....	.....	.....	.....	4	4
.....	1	417	.....	.....	.....	.....	7	7
.....	.....	43	.....	.....	.....	.....	.....	.....
.....	.....	119	.....	.....	.....	1	11	12
1	.....	31	.....	.....	.....	.....	.....	.....
.....	.....	402	.....	.....	.....	1	4	5
.....	1	21	.....	.....	.....	2	6	8
.....	1	542	.....	.....	.....	20	13	33
.....	1	116	.....	.....	.....	5	1	6
.....	.....	76	1	.....	.....	.....	6	6
.....	.....	91	.....	.....	.....	.....	.....	.....
.....	.....	111	.....	.....	.....	62	3	65
.....	.....	73	.....	.....	.....	2	.....	2
.....	.....	87	.....	.....	.....	.....	.....	.....
.....	1	259	.....	.....	.....	2	5	7
.....	.....	263	.....	.....	2	.....	.....	.....
.....	.....	67	.....	.....	.....	.....	.....	.....
.....	.....	752	.....	.....	.....	1	.....	1
2	.....	170	.....	.....	1	12	5	17
2	.....	237	.....	.....	.....	6	10	16
.....	.....	60	.....	.....	.....	7	1	8
.....	1	50	.....	.....	.....	1	5	6
.....	.....	701	.....	.....	.....	3	10	13
7	1	713	.....	.....	33	316	11	327
.....	.....	36	.....	.....	.....	.....	.....	.....
.....	.....	294	.....	.....	2	2	.....	2
.....	.....	264	.....	.....	1	3	3	6
.....	.....	101	.....	.....	.....	2	.....	2
32	9	8,678	1	1	45	475	299	774

TABLE

Showing the number of prisoners, how maintained, cost of maintenance, and

Name of Gaol	Name of Gaoler	How maintained				
		Total number of prisoners committed during the year	Number paid for by Province	Number paid for by municipalities	Number of days' custody of Government prisoners	Number of days' custody of municipal prisoners
Barrie	J. J. D. Banting	188	53	135	1,459	3,039
Belleville	J. Ketcheson	356	160	196	2,274	4,320
Bracebridge	Duncan McDonald	61	61	.....	2,211	.....
Brampton	W. A. Partridge	89	36	53	575	613
Brantford	John Cook	254	98	156	2,272	3,875
Brockville	J. A. McLean	159	60	99	1,384	2,348
Cayuga	Jas. B. Smith	175	22	153	689	1,466
Chatham	M. W. Shaw	474	56	418	1,823	8,008
Cobourg	G. L. McLaughlin	143	55	88	1,453	2,288
Cornwall	T. W. Ault	233	93	140	2,044	2,645
Fort Frances	John E. King	233	233	.....	3,424	.....
Goderich	Jas. B. Reynolds	89	33	56	1,185	1,264
Gore Bay	J. W. Griffith	19	19	.....	1,011	.....
Guelph	Major Thorne Cosby	152	91	61	1,637	2,256
Haileybury	John L. Maltby	414	414	.....	18,400	.....
Hamilton	Frank V. Lalonde	1,105	175	930	6,596	14,621
Kenora	E. Cox	136	136	.....	3,568	.....
Kingston	Jos. T. Hawkey	240	79	161	2,267	4,967
Kitchener	Jonathan Cook	284	57	227	1,616	4,559
Lindsay	Henry W. Stone	102	37	65	1,297	1,508
London	Chas. H. Mitchell	925	88	837	1,698	13,043
L'Orignal	Felix Millette	49	10	39	342	1,467
Milton	Archie McGibbon	217	49	168	825	2,785
Napanee	W. E. Loyst	75	34	41	551	656
North Bay	J. W. Bourke	575	575	.....	8,122	.....
Orangeville	Geo. A. Leighton	69	23	46	1,426	1,590
Ottawa	A. G. Dawson	1,061	185	876	10,022	10,855
Owen Sound	W. A. Grier	172	55	117	1,974	3,141
Parry Sound	Thomas W. Keating	210	210	.....	4,486	.....
Pembroke	William Brown	106	38	68	986	2,316
Perth	John Oates	188	92	96	1,847	4,400
Peterborough	Thos. D. Johnston	227	46	181	875	2,693
Picton	E. Croft	94	31	63	849	578
Port Arthur	G. F. Lasseter	1,132	133	999	2,289	14,325
St. Catharines	John J. Dundas	353	35	318	1,253	8,414
St. Thomas	C. P. Ermatinger	242	70	172	1,160	3,230
Sandwich	W. A. Wanless	1,387	133	1,254	5,442	21,809
Sarnia	J. N. Dodd	336	90	246	2,069	6,066
Sault Ste. Marie	R. M. Hearst	379	379	.....	13,965	.....
Simcoe	Oliver Robertson	123	56	67	1,884	819
Stratford	A. T. Trethewey	137	66	71	1,853	2,501
Sudbury	W. H. O'Leary	1,499	1,499	.....	11,656	.....
Toronto	Major G. H. Basher	8,085	902	7,183	14,957	58,730
Walkerton	Matthew W. Hyndman	105	25	80	922	1,146
Welland	Donald Sharpe	530	99	431	3,156	8,436
Whitby	Hugh F. Lucas	401	110	291	2,003	6,194
Woodstock	George Forbes	203	48	155	1,576	2,547
		23,786	7,049	16,737	155,373	235,518

No. 5

salaries of various gaol officials, for the year ending Septebmer 30th, 1928.

Expenditure					Salaries			
Cost of fuel, food and clothing	Cost of official salaries	Cost of repairs	Total gaol expenditure for the year	Average cost per prisoner	Gaolers	Turnkeys, etc.	Matrons	Gaol surgeons
$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.	$ c.
2,164 94	3,470 00	61 91	5,696 85	1 27	1,200 00	1,470 00	500 00	300 00
3,695 00	2,000 00	100 00	5,795 00	88	700 00	650 00	400 00	250 00
686 60	1,850 00	27 00	2,563 60	1 16	1,400 00	.....	300 00	150 00
909 58	1,670 00	91 43	2,671 01	2 25	720 00	600 00	250 00	100 00
1,338 98	4,956 07	.....	6,295 05	1 62	1,458 34	2,745 73	400 00	352 00
2,076 84	2,278 70	181 93	4,537 47	1 22	1,150 00	778 70	200 00	150 00
1,019 72	2,340 00	8 25	3,367 97	1 56	1,000 00	900 00	300 00	140 00
3,791 44	5,101 00	166 13	9,058 57	92	1,080 00	3,321 00	500 00	200 00
4,268 05	2,344 00	107 40	6,719 45	1 26	1,000 00	944 00	200 00	200 00
2,567 77	2,904 50	428 18	5,900 45	1 26	1,500 00	904 50	350 00	150 00
1,161 55	2,577 00	169 70	3,908 25	1 14	900 00	1,249 00	300 00	128 00
1,037 59	2,245 00	130 28	3,412 87	1 39	1,000 00	900 00	225 00	120 00
1,771 14	1,043 24	70 72	2,885 10	2 85	754 52	.....	288 72	.....
1,590 68	2,322 99	.....	3,913 67	1 01	1,000 00	822 99	300 00	200 00
5,997 13	6,277 50	605 69	12,880 32	73	1,600 00	4,077 50	300 00	300 00
4,614 00	12,080 00	1,050 00	17,744 00	83	1,800 00	9,100 00	600 00	580 00
2,420 49	2,593 00	.....	5,013 49	1 41	900 00	1,293 00	200 00	200 00
3,015 85	4,475 00	150 00	7,640 85	1 08	1,500 00	2,275 00	400 00	300 00
2,408 57	3,338 90	269 81	6,017 28	97	1,100 00	1,329 00	409 90	500 00
1,501 30	2,500 00	416 46	4,417 76	1 57	960 00	1,200 00	240 00	100 00
4,252 58	10,300 98	96 08	14,649 64	99	1,371 29	7,127 77	1,401 92	400 00
616 38	1,830 00	.....	2,446 38	1 35	750 00	730 00	250 00	100 00
934 06	1,900 00	12 00	2,846 06	81	900 00	750 00	200 00	50 00
628 16	1,475 00	75 00	2,178 16	1 80	1,000 00	.....	400 00	75 00
2,459 05	6,337 70	618 56	9,415 31	1 15	934 48	4,932 50	320 72	150 00
1,922 43	1,825 00	1,863 15	5,610 58	1 85	1,300 00	.....	400 00	125 00
10,022 00	10,295 00	424 76	20,741 76	1 03	2,300 00	6,900 00	730 00	365 00
3,316 03	2,650 00	50 00	6,016 03	1 18	1,200 00	900 00	300 00	250 00
1,757 14	3,050 00	45 00	4,852 14	1 08	1,400 00	1,200 00	300 00	150 00
1,409 35	3,028 75	.....	4,438 10	1 34	1,700 00	1,003 75	225 00	100 00
2,260 09	3,245 00	87 32	5,592 41	73	1,000 00	1,845 00	300 00	100 00
1,225 15	2,050 00	83 24	3,358 39	93	900 00	800 00	200 00	150 00
76 28	1,075 00	328 94	1,480 22	1 04	800 00	.....	200 00	75 00
8,990 12	6,711 50	.....	15,701 62	94	1,460 00	4,459 50	540 00	252 00
3,893 75	3,584 00	209 69	7,687 44	79	1,200 00	1,934 00	300 00	150 00
1,648 76	3,528 46	50 00	5,227 22	1 19	993 30	2,135 16	250 00	150 00
8,602 90	11,578 77	230 25	20,411 92	75	1,600 00	8,878 77	600 00	500 00
2,864 38	3,482 96	1,167 60	7,514 94	92	1,075 00	1,707 96	500 00	200 00
7,203 14	4,714 34	984 95	12,902 43	93	1,065 44	3,048 90	300 00	300 00
1,508 77	2,230 00	96 66	3,835 43	1 42	840 00	1,020 00	250 00	120 00
2,148 14	2,673 31	188 35	5,009 80	1 15	1,041 65	1,031 66	450 00	150 00
3,204 82	6,281 50	.....	9,486 32	81	1,600 00	4,231 50	300 00	150 00
21,131 02	40,482 73	4,354 40	65,968 15	89	4,787 20	30,330 57	3,864 96	1,500 00
736 71	1,800 00	630 71	3,167 42	1 53	800 00	650 00	250 00	100 00
7,362 47	5,272 50	272 87	14,907 84	1 11	1,112 50	3,610 00	350 00	200 00
2,992 89	3,935 95	661 64	7,590 48	93	850 00	2,638 14	297 81	150 00
2,886 93	2,993 00	266 08	6,146 01	1 49	900 00	1,581 00	312 00	200 00
154,090 72	216,698 35	16,832 14	387,621 21	.....	57,603 72	128,006 60	20,456 03	10,632 00

TABLE No. 6

Showing the total number of prisoners who were in the several gaols in the Province on the evening of September 30th, 1928, and the nature of their imprisonment; also number of cells in each gaol.

Name of Gaol	Classification				Nature of Imprisonment						Total number of persons who remained in custody, 30th Sept., 1928	Total number of cells
	Men	Women	Boys under 16 years	Girls under 16 years	Waiting trial	Under sentence for periods of 2 months and under	Under sentence for periods over 2 months	In default of sureties to keep the peace	Insane, idiotic or imbecile persons	Otherwise detained		
Barrie	9	...	...	..	3	1	4	...	1		9	23
Belleville	18	1	...	..	4	6	9	...	...	...	19	38
Bracebridge	6	...	...	..	3	2	1	...	...	...	6	10
Brampton	5	...	...	..	...	1	4	...	...	...	5	24
Brantford	9	...	...	..	1	4	4	...	...	...	9	24
Brockville	13	1	...	..	4	5	5	...	...	...	14	33
Cayuga	3	...	...	..	1	1	1	...	...	...	3	12
Chatham	29	4	...	..	9	17	5	...	...	2	33	40
Cobourg	10	1	1	..	4	1	5	...	2	...	12	24
Cornwall	17	1	...	..	2	3	12	...	1	...	18	17
Fort Frances	11	1	...	..	3	4	2	...	3	...	12	10
Goderich	7	...	...	..	1	1	5	...	...	...	7	16
Gore Bay	2	...	...	..	...	...	2	...	...	...	2	12
Guelph	4	...	...	..	1	1	2	...	...	...	4	18
Haileybury	39	4	...	..	1	20	17	...	5	...	43	32
Hamilton	35	10	...	..	6	15	24	...	...	...	45	60
Kenora	11	...	...	..	...	4	6	...	1	...	11	14
Kingston	18	1	...	..	...	11	8	...	...	...	19	49
Kitchener	9	2	...	..	2	8	1	...	...	...	11	20
Lindsay	9	1	...	..	3	5	1	...	1	...	10	24
London	28	4	...	..	11	15	6	...	...	...	32	57
L'Orignal	5	1	...	..	1	...	...	...	...	5	6	18
Milton	5	...	...	..	3	1	1	...	...	...	5	19
Napanee	3	1	...	..	3	...	1	...	...	...	4	18
North Bay	17	1	...	..	3	8	3	...	4	...	18	19
Orangeville	9	1	...	..	...	...	10	...	...	...	10	22
Ottawa	50	6	...	..	11	17	28	...	...	...	56	93
Owen Sound	11	...	...	..	5	4	2	...	...	...	11	32
Parry Sound	11	...	...	..	1	4	6	...	...	...	11	22
Pembroke	7	...	...	..	...	3	4	...	...	...	7	24
Perth	17	...	...	..	1	3	13	...	...	...	17	18
Peterboro	5	...	...	..	3	2	...	...	...	...	5	18
Picton	3	...	...	..	...	1	2	...	...	...	3	18
Port Arthur	36	6	...	..	2	23	15	...	2	...	42	73
St. Catharines	19	1	...	..	3	11	6	...	...	...	20	36
St. Thomas	8	...	...	..	...	3	4	...	...	1	8	16
Sandwich	70	8	...	..	...	26	40	...	1	11	78	109
Sarnia	21	1	...	..	2	12	8	...	...	...	22	13
Sault Ste. Marie	30	1	3	..	8	15	9	...	2	...	34	23
Simcoe	7	...	...	..	4	2	1	...	...	...	7	18
Stratford	13	...	...	..	5	4	4	...	...	...	13	30
Sudbury	20	3	...	..	...	21	1	...	...	1	23	22
Toronto	209	21	4	2	103	33	87	...	2	11	236	214
Walkerton	7	1	...	..	4	...	3	...	1	...	8	24
Welland	25	1	...	..	5	17	4	...	...	...	26	48
Whitby	13	1	...	..	2	8	4	...	...	...	14	28
Woodstock	4	1	...	..	2	1	2	...	...	...	5	32
Totals	917	86	8	2	230	344	382	...	26	31	1,013	1,564

TABLE No. 7

Showing the number of escapes and deaths, the revenue derived from prison labour, the cost of diet, the accommodation of the various gaols, and the highest and lowest number of prisoners in custody during year ending September 30th, 1928.

Name of Gaol	Prisoners who escaped and evaded capture	Prisoners who escaped and were recaptured	Prisoners who died	Number of cells in each gaol	Greatest number of prisoners confined in gaol at any time during year	Least number of prisoners confined in gaol during year	Actual cash revenue derived from prison labour	Daily per capita dietary cost
							$ c.	cents
Barrie				23	22	4		16.75
Belleville				38	28	7		16.89
Bracebridge	1			10	10	2		14.75
Brampton				24	10			16.00
Brantford				24	32	8		15.75
Brockville		3		33	16	4		12.15
Cayuga				12	18	1		16.42
Chatham				40	42	14		13.22
Cobourg				24	17	4		17.50
Cornwall				17	24	2		17.75
Fort Frances			1	10	17	3		16.68
Goderich				16	18	5		13.75
Gore Bay				12	6	1		60.00
Guelph				18	22	4		23.50
Haileybury				32	75	33		19.00
Hamilton				60	84	34		15.16
Kenora				14	23	5		18.65
Kingston				49	30	12	2,200 00	16.00
Kitchener				20	29	7		16.07
Lindsay				24	13	3		14.30
London				57	62	20		14.40
L'Orignal				18	13	2		22.00
Milton		1		19	17	4		15.57
Napanee				18	10	1		13.48
North Bay				19	39	7		14.75
Orangeville		1		22	13	4		23.75
Ottawa				93	84	35	662 65	17.00
Owen Sound				32	23	6		18.18
Parry Sound				22	27	6		20.93
Pembroke		2		24	16	4		15.00
Perth				18	17	5		12.60
Peterborough				18	16	1		16.50
Picton				18	10	2		14.00
Port Arthur		1		73	77	26		18.50
St. Catharines				36	47	13		14.66
St. Thomas				16	23	6		12.86
Sandwich				109	112	37		14.00
Sarnia				13	36	11		15.25
Sault Ste. Marie				23	55	23		23.62
Simcoe				18	15	1		14.35
Stratford		2		30	18	6		12.73
Sudbury				22	75	14		21.20
Toronto			2	214	289	136		13.00
Walkerton				24	12			14.75
Welland		2		48	46	16		15.65
Whitby		1		28	36	10		16.50
Woodstock				32	21	3		13.56
Totals	1	13	3	1,564	1,745	552	2,862 65	17.21

TABLE No. 8

Showing the daily cost per prisoner in each of the gaols, excluding the District Lock-ups, for the year ending September 30th, 1928

Name of Gaol	Number of prisoners committed during year	Total days' stay of prisoners during year	Cost of fuel, food and clothing	Average cost per day for fuel, food and clothing
			$ c.	cents
Barrie	188	4,498	2,164 94	.48
Belleville	356	6,594	3,695 00	.56
Bracebridge	61	2,211	686 60	.31
Brampton	89	1,188	909 58	.76
Brantford	254	6,147	1,338 98	.22
Brockville	159	3,732	2,076 84	.56
Cayuga	175	2,155	1,019 72	.47
Chatham	474	9,831	3,791 44	.38
Cobourg	143	3,741	4,268 05	1.14
Cornwall	233	4,689	2,567 77	.55
Fort Frances	233	3,424	1,161 55	.34
Goderich	89	2,449	1,037 59	.42
Gore Bay	19	1,011	1,771 14	1.75
Guelph	152	3,893	1,590 68	.41
Haileybury	414	18,400	5,997 13	.32
Hamilton	1,105	21,217	4,614 00	.22
Kenora	136	3,568	2,420 49	.68
Kingston	240	7,234	3,015 85	.42
Kitchener	284	6,175	2,408 57	.39
Lindsay	102	2,805	1,501 30	.53
London	925	14,741	4,252 58	.29
L'Orignal	49	1,809	616 38	.34
Milton	217	3,610	934 06	.26
Napanee	75	1,207	628 16	.52
North Bay	575	8.122	2,459 05	.33
Orangeville	69	3,016	1,922 43	.63
Ottawa	1,061	20,877	10,022 00	.48
Owen Sound	172	5,115	3,316 03	.65
Parry Sound	210	4,486	1,757 14	.39
Pembroke	106	3,302	1,409 35	.42
Perth	188	6,247	2,260 09	.36
Peterborough	227	3,568	1,225 15	.34
Picton	94	1,427	76 28	.53
Port Arthur	1,132	16,614	8,990 12	.54
St. Catharines	353	9,667	3,893 75	.40
St. Thomas	242	4,390	1,648 76	.38
Sandwich	1,387	27,251	8,602 90	.32
Sarnia	336	8,135	2,864 38	.35
Sault Ste. Marie	379	13,965	7,203 14	.52
Simcoe	123	2,703	1,508 77	.56
Stratford	137	4,354	2,148 14	.49
Sudbury	1,499	11,656	3,204 82	.27
Toronto	8,085	73,687	21,131 02	.29
Walkerton	105	2,068	736 71	.35
Welland	530	11,592	7,362 47	.63
Whitby	401	8,197	2,992 89	.37
Woodstock	203	4,123	2,886 93	.70
Totals	23,786	390,891	154,090 72	.47

Reformatories

ONTARIO BRICK & TILE PLANT, MIMICO, ONTARIO

H. M. Robbins, Esq., November 5th, 1928.
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ontario.

Dear Sir:—

I have the honour to present you with the Annual Report of this Institution for the year 1927-1928.

November 1st, last year, we took over the criminal records from The Ontario Reformatory, Guelph, who up to that time were responsible for same. We have found the change to prove quite satisfactory and more helpful to all concerned.

Health of Inmates

During the past year we have been very fortunate regarding the health of inmates, having only a few isolated cases where it was necessary to have them transferred to a hospital.

Population

We admitted this past year 344 men, leaving a population of 145 on our strength at the end of the present year, this being the largest count in the history of the institution.

Farm

Stock.—Last April, we purchased through Mr. Beatty, a herd of thirteen holsteins and twenty-one jersey cows, valued at eight thousand and twenty-five dollars ($8,025.00). The stock and equipment consisting of 34 cattle, $8,025.00; 8 horses, $1,000.00; 113 hogs, $2,350.40; implements, $1,648.00. Our grain and crops proved very satisfactory owing to a considerable amount of under-draining; vegetables and roots also showing far above the average. We are undertaking to supply this winter, three institutions besides ourselves.

Buildings

We have added several buildings and improvements this year, which include: Office in machine shop; oil room and office off boiler room; new transformer house; brick shed now in construction. The barns and outbuildings of the institution have all been painted. I might state here that an extensive alteration of the cattle stable is very necessary in the near future.

Factory

We have been busy filling orders; fortunately we had no serious breakdowns to hold up the output.

Entertainments

Concerts and entertainments have been arranged from time to time under the direction of Major Sheard and Major McElhiny. Mr. Morresy from the city has on several occasions, helped us by bringing entertainers out, which we appreciated very much. The staff had a very pleasant and enjoyable dance last Christmas, by the kind permission of the Minister.

In conclusion I wish to thank you, Sir, and also all officials for their co-operation in making this institution run so smoothly during the past year.

Yours obediently,

J. R. Elliott,
Superintendent.

INDUSTRIAL FARM, BURWASH, ONT.

December 19th, 1928.

Dear Sir:—

I have the honour to submit to you the Annual Report for this institution for the year ending October 31st, 1928.

Our statistical report from the custodial department shows that we have had a larger number of first offenders than at any time in the history of the institution, namely, seven hundred and sixty. We have also carried the largest population of any year, namely, 1,175.

Buildings

During the past year we have had a rather heavy building programme; we have widened the main dormitories and brought them down to the two tier of beds, this has made roomy and well-ventilated dormitories. We have also added new night room of 30 beds, new day room, dental clinic, three lavatories, 12 bedrooms for guards, and are at present finishing new venereal clinic, lavatory, day room and dining-room. We have also built large out-buildings at Camp No. 5, and converted two homes into flats, making increased accommodations for our married men. We erected on the front of our dormitory a new building, housing sergeant's office, two bedrooms, lavatory, clothes room and waiting room.

Farm Products

The total value of farm produce, grain, vegetables and milk, etc., amounts to $32,828.25. The value of lumber used for building, fuel and for other purposes amounts to $28,699.02, making a total of $61,527.27. This is an increase over the previous year.

Farming operations in the north country have been practically a failure in the last year, indeed, many farmers are absolutely ruined, and despite the fact that we had more than our share of rain along with the other fellow, we had very good crops over our farm.

Service

I am very grateful for the courtesy and helpful service of the officers of the department; it enables us in our isolation to carry on.

Sincerely yours.

J. K. Fairfield,
Superintendent.

THE INDUSTRIAL FARM

Fort William, Ont., January 10th, 1929.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto, Ont.

Sir:—

I have the honour to submit herewith the annual statistical report for this institution for the fiscal year ending October 31st, 1928, and in doing so I would like to make a few general comments on the year's work.

For the past two years our admissions have shown a marked increase over the years preceding; in 1926 we had 312 commitments; in 1927, 487, and in 1928, 551.

Our population continues in a good state of health. We have had no epidemics, and very little ordinary sickness during the past year, and during the recent 'flu epidemic we did not have a single case among our custodial population.

Discipline in the institution has presented no exceptional difficulties in the year. The greater percentage of our inmates appreciate fair treatment and respond by faithful work and good discipline. We have had no escapes from the institution during the fiscal year.

Our crops have been a fair average in 1928. I pointed out in our 1927 report that we are lacking in barn and stable accommodation. We are bringing more land under cultivation each year and we cannot house sufficient livestock to maintain our soil fertility. This year we had to stack all our grain and 50 tons of hay.

Some thought should soon be given to the establishment of a winter industry at this institution. At the present time we have a visible supply of only two years' wood for fuel. When this is exhausted we will either have to secure more land or burn coal, and in case of the latter, we would have no employment for a large part of our population for the winter months.

The Rev. D. McIvor, of Fort William, and the local unit of the Salvation Army conduct religious services for the inmates at the institution on alternate Sundays. Much good work, social and religious, is being done by the Rev. Mr. McIvor and the officers of the Army, and their efforts are sincerely appreciated by inmates and staff.

Agricultural Extension Work

This institution has for some years carried on a limited amount of agricultural extension work; we have maintained pure-bred herds of Holstein cattle, Yorkshire swine and a flock of Oxford sheep, with the object of supplying breeding stock to the farmers of this area. The young males are sold at very reasonable prices, and we believe that this service has considerably improved the class of livestock in the district. A young Percheron stallion, "Pride of Commodore," was purchased last year and stands for service at the farm.

In March last year in co-operation with the agricultural representatives a four weeks' short course in agriculture was held at this institution. This course was attended by 39 farm boys from the district. The boys were supplied with board and lodging and received their instruction at the farm.

This year we completed a three-year experiment in the testing of ten varieties of wheat, ten varieties of oats and nine varieties of barley, with the object of ascertaining the most suitable varieties of cereals for this north country, and we believe that we have obtained some valuable information. These tests were made by the rod row method and in co-operation with the cereal division of the Central Experimental Farm at Ottawa.

In conclusion, I beg to thank you and all the officers of the department for their co-operation and guidance in carrying on the work here and commend to you the loyal services of the staff of this institution.

All of which is respectfully submitted.

Yours faithfully,

H. M. McElroy,
Superintendent.

INDUSTRIAL FARM, LANGSTAFF, ONTARIO

In submitting his twelfth annual report for the above institution, Major W. J. Morrison, Superintendent, makes the following comment:

> "In reviewing the past year's figures it is noted that 2,027 inmates were committed to the institution as compared with 2,670 during the previous year, a decrease of 643, this being accounted for by the fact that longer terms have been imposed instead of the very short terms formerly given; the average monthly count being 309.66. There was only one escape and the offender was apprehended shortly after and was given a substantial term of imprisonment; there were nine deaths during the year, the most of whom were aged inmates. The health of the institution was on a very satisfactory footing as regards epidemic diseases. Due attention has been paid to social disease as you will note from the report of the institution surgeon. The discipline of the inmates remains exceptionally good, which in a measure is due to the fact that inmates can earn time off for good conduct and application to work."

He also desires to extend his thanks to all those who have ministered to the spiritual and social welfare of the inmates, among whom are Captain Buntin, Salvation Army; Canon J. C. Davidson, Church of England; Rev. Fr. Malone, Roman Catholic Church; Mrs. Cooper and Mrs. Barker of the Christian Science Church; Mr. Fred Graham, of the Y.M.C.A., and many others.

INDUSTRIAL FARM

Concord, Ont., July 5th, 1929.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

Dear Sir:—

I have the honour to submit for your information the annual report for the Municipal Farm for Women, Concord, Ontario, for the year 1927-28.

Discipline throughout the year has been good,—of course, there are always a few whose mental or physical condition makes them rather difficult—fortunately these have been in the minority.

The health of the 241 inmates who have passed through during the year has been excellent. There were no serious illnesses, and no deaths to record. This is no doubt, due to the careful supervision of the attending physician, Dr. Lillian Langstaff, who makes a detailed report to the superintendent on the physical and mental condition of each inmate upon entering the institution, so that proper treatment is given, also advice, concerning work for which the individual is adapted.

We regret to record the passing away of Miss G. A. Carson, who will be much missed by the staff with whom she was very popular, as well as with the inmates who came under her kindly supervision during the thirteen years of service as matron in the institution.

Developing Outside Work for Inmates

The garden and dairy work and the care of the poultry is now successfully carried on under the supervision of a capable "Farmerette."

We wish to gratefully acknowledge the help given by Rev. Archdeacon Davidson, Rev. Father Malone, and different officers of the Salvation Army, in conducting religious services and entertainments throughout the year. Also to Adjutant Mary Bridge, social service worker of the Salvation Army, who visits regularly at the "Farm," keeping in touch with those who are in need of employment, or friends to help them when released from custody.

In conclusion, Sir, permit me to express to you and all the officers of your department, my sincere appreciation for the courtesy and assistance I have at all times received, and to commend to you the loyal services of this staff.

All of which is respectfully submitted.

I have the honour to be, Sir,

Your obedient servant,

Margaret Maud Carson,
Superintendent.

MERCER REFORMATORY

Toronto, December 4th, 1928.

H. M. Robbins, Esq.,
Deputy Provincial Secretary,
Parliament Buildings, Toronto.

Sir:—

I have the honour to submit herewith the annual report of the Andrew Mercer Reformatory for Females for the year ending October 31, 1928.

The statistical tables for the year show a slight increase in the number admitted to the institution. Of the 180 admitted, 127 were under 24 years of age, and 53 were between the ages of 24 and 50. The number committed for the first time was 145. Having first offenders increases our responsibility to so train and encourage them that a lasting impression for good will be carried by each one from the reformatory.

The average inmate received requires to be taught everything—order, neatness, cleanliness, sewing, cooking and other domestic arts, as well as the elements of reading and writing, etc. To all is given such training as may enable them to earn an honest living when released. In the factory, where all kinds of sewing for government institutions is turned out, opportunity is given inmates to become skilled operators. In our laundry (where laundering is done for the Psychiatric Hospital, the Boys' Training School at Bowmanville, the Ontario Brick & Tile plant at Mimico, and for our own institution), in the bake shop, the kitchen, and the dining-rooms, etc., an excellent training is given in domestic work.

In conclusion, permit me to express my thanks to you and all the officials of your department for the consideration and courtesy which have always been accorded me, and to my staff for the faithful service rendered.

To the many kind friends who have remembered the institution on holiday occasions with gifts, and to those who have placed their talents at our disposal for concerts and entertainments, my thanks are sincerely tendered.

I have the honour to be, Sir,

Your obedient servant,

Letitia Scott,
Superintendent.

REPORT OF THE ONTARIO BOARD OF PAROLE FOR YEAR ENDING OCTOBER 31, 1928

In submitting the report for the past year a comparative statement is given below from which it will be seen that the number of cases dealt with was larger than in any previous year, involving a greater amount of labour and necessitating the full time of the three officers which we were fortunate in having, and also making it necessary to add another stenographer to our office staff.

The statistical record for the year is as follows:

Meetings of the Board	26
Cases dealt with	1,680
Paroles authorized	650
Paroles put into effect	369
Disappeared	35
Committed crime while on parole	31
Sent back and parole cancelled	24
Recommended for extra-mural employment (Cap. 163, R.S.C. ss. 13-15, 49, 61.)	305
Recommended for ticket-of-leave	5

The following is the record for four previous year.

	1916	1925	1926	1927
Cases dealt with	164	1,347	1,296	1,364
Parole authorized	52	408	473	504
Disappeared	....	25	41	46
Committed crime on parole	no		16	18
Sent back and parole cancelled	record	41	30	21
Recommended for extra-mural employment	....	108	116	141
Recommended for ticket-of-leave	23	25	16	11

In the above figures for 1925 we are not able to give the number who committed crime on parole as distinct from those whose paroles were merely cancelled. The total for these two in that year was 41, which is about the same as in other years.

It will be noted that the number of paroles authorized was considerably in excess of those put into effect. The reason for this is that in a large number of cases the parole was authorized to take effect at a later date than the end of the fiscal year. There are also a number authorized in every year which cannot be put into effect because of inability to meet the conditions. Sometimes there is misbehaviour by the prisoner in the institution. Sometimes work is not available. At other times facts come to light which were not available when the decision of the board was given. In a number of cases paroles are authorized to take place the following spring when farm positions will be open.

The percentage of failures should, of course, be computed upon the number actually paroled, and on this basis the percentage of custodial failures (that is, persons on parole who disappeared or committed crime), was about eighteen per cent. of those actually paroled. Considering the salvage nature of our work and the kind of material we deal with, this would appear to be a very fair figure, and means that over eighty per cent. of those paroled made good, at least during the period of supervision, and from past experience, it can be confidently expected that the majority of these will continue to succeed. We had to return twenty-four persons to the institutions from which they were paroled because it was considered unfair to the public to try them outside for the full period of their sentence.

Their behaviour under supervision was not such as made it wise to continue them further on parole.

As in past years, the failures fall into two classes: those who broke faith when there was nothing apparent in their past history that would lead one to expect failure, and those who when paroled were considered rather doubtful risks, but to whom it was considered proper to give a chance of reformation, the indeterminate sentence having been given by the court for that purpose. The fundamental aims of the board are the re-establishment of criminals, the prevention of crime and the protection of the public. It is believed that in many cases the parole of a prisoner is more likely to accomplish these objects than his retention in prison until the end of his full sentence, but every prisoner is paroled under certain specific and strict conditions, and if these conditions are not faithfully kept the board does not consider it safe either for the public or the prisoner to keep him outside on parole. He is with regret sent back, but no prisoner is returned to the institution without urgent cause, as we believe that our duty is to guide as many as possible into civil re-establishment. Sometimes warnings and caution are effective. When these fail there is only one recourse, and that is return to close custody.

The personnel of the board is as follows: Chairman, Mr. G. S. Matthews; vice-chairman, Mr. W. A. Evans; vice-chairman, Judge Emerson Coatsworth; Mr. J. B. Tudhope, Mr. D. Miller, Judge J. F. McKinley, Dr. F. C. Grenside, Mrs. D. M. Brodie and Mr. G. B. Woods.

The executive staff consists of Dr. Alfred E. Lavell, Secretary and Chief Officer, Mr. E. J. Etherington and Mr. T. D. Bell, parole inspectors. The clerical staff consists of four stenographers and a filing clerk.

Signed on behalf of the Ontario Board of Parole.

G. S. Matthews,
Chairman.

REPORT OF THE SALVATION ARMY IN ONTARIO*

The manifold operations of the Salvation Army continued during 1928. These operations include the management of Hostels and Labour Bureaus in Toronto, Ottawa, Hamilton, London and Windsor. The Hostels supply beds and meals to the deserving and when there is actual poverty these services are given free. In the Hostels there are over 400 beds which are filled all the time. Special beds are reserved for discharged prisoners until they find work. The Bureau found work for over 8,000 persons in Toronto and about 7,600 outside of Toronto.

Work is carried on in twenty County Gaols and at the Provincial Institutions at Burwash, where two Officers are giving their whole time; also at Guelph, Mimico, Langstaff, Concord and the Mercer Reformatory. In some of the police courts the prisoners are given suspended sentences and handed over to the care of the Army.

The families of 888 prisoners were looked after in Toronto, their rent was paid to the extent of $918. Clothing and food was supplied to over 3,600 persons, most of whom were prisoners.

Much of the work of the Salvation Army cannot be described in actual material terms. Interviews with 18,765 persons, services held in prisons, visits made to struggling ex-prisoners in their homes, letters written for them and for their families, who were in want, and Christmas gifts, raised largely by the Self-Denial offerings of the Army members, cannot be written down in dollars and cents. This is an order of values that is spiritual and as such cannot be appraised as entries in a ledger. In Ontario the Army spent $16,188.68 and the contribution from the Province was $5,500; from Toronto City, $2,100; from all other sources, $953.92; which shows a deficit that had to be raised by the Army of $7,654.76.

TABLE

Showing the number of prisoners in custody October 31st, 1928, the number
the number in custody.

	In custody Oct. 31st, 1927	Committed during year	Total number in custody	Discharged on expiration of sentence	Discharged by ticket-of-leave	Discharged by Parole Board	Discharged by payment of fines
Ontario Reformatory—Guelph	524	1,001	1,525	512	16	269	6
Ontario Reformatory—Mimico	120	352	472	146	34	70	9
Industrial Farm—Burwash	320	1,175	1,495	888	4	117	22
Industrial Farm—Fort William	56	551	607	475	....	4	23
Industrial Farm—Langstaff (males)	311	2,027	2,338	1,766	3	7	76
Industrial Farm—Concord (females)	34	207	241	191	2	4	5
Mercer Reformatory—Toronto (females)	181	180	361	149	2	18	....
Totals	1,546	5,493	7,039	4,127	61	489	141

No. 1

received during the year, the number discharged, died, etc., and on October 31st, 1928.

Discharged by remission of sentence	Discharged by Order-in-Council	Discharged by Minister of Justice	Conditional discharges	Other reasons	Escaped	Returned to gaols	Transferred to penitentiaries	Transferred to hospitals for insane	Transferred to provincial institutions	Released on writ of Habeas Corpus	Died while in custody	Remaining in custody, Oct. 31st, 1928
2	124	.....	2	31	3	.....	.....	.....	23	.....	2	535
.....	9	6	.....	9	2	.....	.....	.....	40	.....	2	145
1	2	71	.....	49	5	.....	11	.....	8	.....	5	312
.....	.....	.....	.....	.....	.....	22	1	.....	.....	.....	1	81
.....	162	.....	2	.....	1	22	.....	.....	.....	.....	9	290
.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	34
.....	.....	.....	1	.....	.....	.....	.....	.....	4	.....	.....	187
3	302	77	5	89	11	44	12	.....	75	.....	19	1,584

TABLE No. 2

Showing Social Conditions

Married	2,081
Single	3,412
	5,493

TABLE No. 3

Showing the Educational Status

Read and write	4,827
Illiterate	666
	5,493

TABLE No. 4

Showing the Habits of Prisoners

Temperate	2,069
Intemperate	3,375
Drug addicts	49
	5,493

TABLE No. 5

Showing the Religions of Prisoners

Anglicans	1,164
United	578
Presbyterians	877
Roman Catholics	2,132
Others	742
	5,493

TABLE No. 6

Showing the Length of the Sentences

One month (or less)	1,308
Two months	930
Three months	1,067
Four months	225
Five months	67
Six months	476
Nine months	44
Twelve months	176
Fifteen months	8
Eighteen months	27
Two years less one day	99
Two years	11
Indeterminate	1,055
	5,493

TABLE No. 7

Showing the Nationalities

Canadian-born	3,343
English	570
Irish	254
Scotch	163
United States	179
Other nationalities	984
	5,493

TABLE No. 8

Crimes against the Person

Assault	156
Cutting, wounding, stabbing, shooting	12
Manslaughter	..
Murder (attempted)	1
Rape	4
Attempted suicide	4
Non-support	33
Miscellaneous	51
	261

Crimes against Property:

Larceny	433
Arson and incendiarism	8
Burglary, housebreaking and larceny	490
Forgery	45
Fraud and false pretences	155
Receiving stolen goods	25
Trespass	367
Miscellaneous	70
	1,593

Crimes against public morals and decency:

Bigamy	6
Inmates of houses of ill-fame	28
Keeping houses of ill-fame	41
Perjury	2
Seduction	7
Indecent assault	30
Miscellaneous	169
	283

Offences against public order and peace:

Escaping and obstructing constables	29
Carrying unlawful weapons	21
Drunk and disorderly	1,347
Breaches of Liquor Law	802
Breaches Inland Revenue Act	22
Breaches Drug Act	55
Vagrancy	935
Other offences	145
	3,356

TABLE No. 9

Showing Occupations when Committed

Agricultural	322
Commercial	1,784
Domestic	505
Labourers	2,051
Mechanics	603
Professional	80
No occupation	148
	5,493

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THIRTY-FOURTH REPORT

CHILDREN'S AID SOCIETIES
LEGAL ADOPTION ACT
UNMARRIED PARENTS' ACT

1927

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

Toronto, February 15th, 1928.

Honourable Lincoln Goldie,
Provincial Secretary,
Parliament Buildings, Toronto.

Sir,—

I have the honour to transmit herewith the Thirty-fourth Annual Report under The Children's Protection Act of Ontario, and the Annual Reports under The Adoption Act, 1927, and the Children of Unmarried Parents' Act, 1927.

I have the honour to be, Sir,

Your obedient servant,

J. J. Kelso,
Superintendent and Provincial Officer.

Toronto, February 18th, 1928.

To His Honour William D. Ross,
Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

The undersigned has the honour to present to your Honour the Thirty-fourth Annual Report under The Children's Protection Act of Ontario, and Annual Reports under The Adoption Act, 1927, and The Children of Unmarried Parents' Act, 1927.

Respectfully submitted,

L. Goldie,
Provincial Secretary.

ONTARIO

THIRTY-FOURTH ANNUAL REPORT

Toronto, February 7th, 1928.

The preparation and presentation of this Thirty-fourth Annual Report marks another year of activity on behalf of needy and handicapped children. The work has gone steadily forward and the year, while crowded with useful activities, has been marked by very few changes either in personnel or purpose. What has been accomplished by the united efforts of the many friends of the children throughout the Province will be evident in the figures given herewith, but figures alone do not tell the whole story as they cannot represent the improvement brought about in social conditions—the happiness created in many homes and the many young lives that have been conserved in health and fitted for worthy citizenship. Loss and waste is evident in many directions, but nowhere is it more tragic than in the wastage of child life. An aim kept steadily in view has been the prevention of this waste and the protection of child life in all parts of our Province with a view to the advance and perfecting of our civilization. The mortality among children has been steadily lessened and physical defects that in former years remained with the child through life have now been corrected, to the advantage of not only the child but the whole community.

In other directions there has been wonderful progress in securing of better health and better conditions of living in the homes of the people.

Before proceeding to a detailed report of Children's Aid activities it might be mentioned that the offices of the Children's Aid Branch are now located once more in the Parliament Buildings in harmony with the policy to group together the various branches of public service carried on under the direction of the Provincial Secretary. This return to former surroundings is much appreciated.

Although the duties and responsibilities of this Branch have been widely extended in recent years, our first and chief responsibility must necessarily be the better care and protection of neglected and dependent children as outlined in the Children's Protection Act of 1893. This pioneer legislation has spread far and wide and its development naturally paved the way for many social reforms now accepted as a matter of course.

The well-defined policy of the Department has been, first of all to keep children in their own homes where at all possible, and failing this to secure for them suitable foster homes instead of retaining them in public institutions.

Under this system nearly 30,000 children have been placed by the various Children's Aid Societies in foster homes, and looking back over this large record it seems quite clear that the policy of home-finding has been a pronounced success. The number of children reported as having been ill-treated or over-worked is insignificant compared with the vast number who have done well and have received excellent care and treatment. It is true that many of the children have been expected to help with ordinary household duties, but this has proved a useful preparation for the duties of later life, and the habits of industry thus established has been a great advantage in adult years.

There has been regular correspondence and visits, and unfavourable conditions have been remedied when they became known; the aim throughout has been to remove any taint of charity or the separation of these children from ordinary community life and this has meant much in the happiness of the young people concerned.

UTILIZING LOCAL PHILANTHROPY

Our Ontario system of child-protection is made effective through the organization of local Children's Aid Societies composed of progressive citizens who from a desire to be of service give freely of their time and thought. Over sixty of these societies are in active operation and the publicity given to their proceedings assures the prompt exposure of child neglect or ill-treatment and the creation of healthy and happy social conditions. In no part of the world is there a more sensitive public sentiment in all that affects child-life than here in this banner Province of Ontario. To the cry of a needy child there is a quick and sure response and appeals in their behalf are generously met. Nothing could be more gratifying than this fine spirit of benevolent interest and service.

The Children's Aid Society does not seek to take children away from their parents for it is fully recognized that a home, with father, mother, and proper nurture and care, is the child's natural heritage. To preserve this to the child is the Society's constant endeavour. What it really aims at is to remove poverty, misery, immorality, sickness and trouble of every kind that militates against the child's welfare and happiness. It is our constant endeavour to patiently work out the family problem and to impress on parents a true sense of their responsibility. The solution for careless living may be found in moving the family to a better house, in getting relatives and friends interested in securing employment—in bringing about church affiliation, anything and everything that will bring about the desired improvement. There are, of course, social conditions that warrant prompt and effective action, and then there should be no hesitation in doing what appears to be absolutely necessary for the best welfare of the child.

CHILDREN MADE WARDS

In the past year 686 children were made wards of Children's Aid Societies by Court Order, and added to those of former years we find a total of 27,243 children for whom this organization became legally responsible during their minority. Many of these, now men and women—heads of families themselves—have amply repaid the assistance and protection afforded them and occupy widely varied positions—from farm labourers and mechanics to the leading professions. We hear frequently from these wards of former days and have often found encouragement in their progress and success.

The number still under age and requiring supervision would be from eight to nine thousand. A comparison with former years shows that there has been a slight decrease in the number of children made wards. The figures are:

Made wards in 1923	786
" " 1924	773
" " 1925	977
" " 1926	809
" " 1927	686

It has to be taken into account, however, that owing to a change in the Children's Protection Act in April, 1927, there were 157 children committed to the Societies as temporary wards. When children are made temporary wards it gives the parents a chance to improve conditions in their home, so that the children may be returned to them. Also maintenance is provided for children while parents are on probationary period.

RELIGIOUS AFFILIATION

Divided into the two great bodies of Christian faith the total of 686 children is made up of 569 Protestant and 117 Roman Catholic children.

How Supervised

All children made wards of a Children's Aid Society are reported at once to the head office, where a complete record is kept of every child. Individual entries are made by means of a fine card system and each child's file can be located without delay. Wards are usually placed in the Children's Shelter to have their physical condition carefully scrutinized before going out to foster homes. The doctor, the dentist, the psychiatrist are all asked to lend expert aid that the child's defects and disabilities may be removed—clothing is provided —moral instruction given—and then the important and anxious task of locating the right kind of foster home where the child's nature and talents may expand under the most favourable conditions. If homes cannot be readily secured in the vicinity, arrangements are made to transfer the child to another locality and often a complete change of neighbourhood is most desirable and leads to better prospects.

Once comfortably settled in its foster home, the superintendent in that county is given the address so that he may call and extend encouragement to both child and foster parents. The correspondence relating to foster children is heavy, and desirably so, for neglect of this important duty would savor of child-desertion. The number of children actually visited during the year was Protestant, 4,590; Roman Catholic, 892, and this represents many arduous journeys in all parts of this wide-stretching province. When a child has been two or more years in a foster home and has become rooted in the affections of the family, provision is made for legal adoption and release of supervision, referred to later on in this report.

Sex and Age

A curiously interesting comparison is that of sex—of the 686 children made wards, 341 were male and 345 female.

Ages of children made wards—227 under three, 117 between three and seven, 107 between seven and ten; 100 between ten and thirteen; 76 between thirteen and sixteen.

It is hardly correct to say that all wards go to foster homes. Of the number dealt with—107 were transferred to the care of relatives—a good plan when it can be safely carried out—and about thirty-five had to be placed in orphanages, hospitals or industrial schools. Of the total—280 were in Children's Shelters awaiting further action when the year ended. There are thirty-eight Children's Shelters and the average daily population would total 500 children. Care should constantly be taken to see that these Shelters are not overcrowded, are adequately officered, and that the children are not kept too long—for they can get as much harm in a Shelter as anywhere else, unless there is efficiency, faithfulness and vigilance.

WHY CHILDREN COMMITTED

On the parental side there are two main causes for the Committal of Children —Desertion of fathers, 140; born out of wedlock, 170; general neglect and depravity is also a leading factor, 156; fathers sent to prison, 23; mental unbalance, 32. Most of the children are quite innocent of offence, but there were thirty-five children from ten to fifteen committed for infractions of law such as theft, persistent truancy, etc.

While 686 children were added at one end, 615 were released at the other, having reached years of maturity or through legal adoption.

Nationality is hard to define statistically, the majority 445 were classified as Canadians born in Ontario, though not always of Ontario-born parents. One hundred and twenty-five were of recent British stock, English predomination, and one, two and three from almost every other country on the globe.

APPEALING TO THE BEST IN PEOPLE

Again let it be noted that improvement in home-life is the great consideration in all this work and that prosecution is only resorted to when milder methods fail. Patient and sympathetic visiting, getting good people interested, arousing ambition and pride for and in their children, will work wonders. Occasionally, however, neglectful parents are brought before the Court and warning given

of the danger of losing their children altogether. In one case with a family of six children ranging in age from eleven down to one year, the conditions in the house were deplorable. The children were found to be in an extreme state of dirt, and all looked miserable and ill-nourished. Their clothing was described as being nothing but rags. The house itself was in a filthy condition, infested with vermin, the natural result of unclean living. This was not due to poverty as the parents were quite able to do better—simply laziness and indifference. It is pleasing to report that bringing them before the magistrate proved a salutary lesson and the chief cause of complaint was removed. This result is frequently brought about through the kindly activity of our local Superintendents.

CHILDREN'S SHELTERS

We now have in active operation in Ontario forty-two Children's Shelters with an average daily population of about 500 children. No difficulty is experienced in maintaining these Shelters as the municipalities fully recognize their responsibility and make generous provision for the maintenance of the work. In some counties the annual grant amounts to from seven to ten thousand dollars. The usual weekly allowance for maintenance of children is seventy-five cents per day, but owing to extra expenses some of the Societies in Northern Ontario are allowed one dollar per day. In Toronto where the Societies claim the right to include capital expenditure in the amount payable, the Court order provides for one dollar and thirty cents per day in the case of the Toronto Society, and one dollar and seventy cents per day to the St. Vincent de Paul Society. This is a marked contrast to the early days of the work when the average amount allowed for the maintenance of child did not exceed fifty cents per day and was more often twenty-five. The ease with which payment is secured constitutes a danger in that the child may drift on for months and sometimes years in a Children's Shelter without determined effort being made to find it a free home. Not only does this entail heavy and unnecessary expense on the municipality, but also deprives the child of benefits conferred by the Act. All our officers and members of Societies should make special effort to see that children are provided with good family home life at the earliest possible date after coming under the permanent care of the Society.

CHILDREN'S SAVINGS ACCOUNT

As pointed out in previous reports, foster parents are encouraged to set apart a small wage for children over fifteen or sixteen years of age, so that they may have something coming to them when they are old enough to appreciate the value of ready cash. The various treasurers of our Children's Aid Societies have trust accounts for about 750 children, and the total amount held in trust at the end of the year was $83,500.00. This money is paid to the boy or girl when they become of age, get married, or at any time the Society may decide they are capable of managing their own affairs. It does not follow that children who have a trust account are better off than others who have no stated sum in the bank, for there are many children enjoying advantages that a few dollars could

never purchase. Some have been assisted by their foster parents to take music and art lessons; others have been financed through special educational courses of various kinds while others have been comfortably maintained long after they had passed the legal age.

It is one of the gratifying features of this work that so much is done by foster parents for children—far more than they ever get credit for.

JUVENILE COURTS

Youthful delinquency is the root problem of nearly all our social troubles, and it is well worth concentrated effort to solve it. Although we have been working at it many years the progress has been slow because of changing conditions, and there has been some hesitancy on the part of municipalities in requesting that the Juvenile Court Law be put into active and efficient operation. Only in a few municipalities has it been proclaimed.

One thing is certain, however, whatever policy may be followed as to leniency in dealing with a first offender, the wrong-doer whether young or old should be made to realize that punishment is inevitable and unescapable. Careful investigation of all the facts is necessary, for if a lad manages to deceive the judge and is let go without detection more harm than good may be the result.

When an offence has been committed there must be real contrition—Godly sorrow—tears of penitence, before the penalty is decided upon. To secure this, individual treatment is essential, for the massing of delinquent boys always has a hardening effect. In a Juvenile Court three lads charged with theft were lined up at the same time, and it was impossible to get at the truth; one lied and the others had to back him up, so that practically nothing was gained. A heart-to-heart talk with the individual boy in a quiet corner would most likely have revealed the truth.

The judge must be able to impress the boy—to dominate his emotions—his will power—and give him the inspiration that will create the desire to do better and strengthen him in overcoming his faults.

In dealing with children the attitude and surroundings should be entirely different from the usual legal procedure, for the Juvenile Court is a spirit—an atmosphere—rather than a law.

The greatest care should be observed to prevent the Court becoming a mere routine performance. In any social movement the natural tendency is to get into fixed habits of action—as the machinery becomes perfected the spirit of self-sacrificing service is apt to go. Some of the Juvenile Court judges make the great mistake of trying to follow Police Court methods.

During one of my visits to the United States a morning spent in the Juvenile Court only left the impression of machine-like precision without appeal to heart or conscience, in fact, it was simply a second-rate Police Court. About thirty cases were passed upon by the judge and not one lad seemed to be influenced for the better by anything that took place.

There should be some inner sanctuary where the boy and the man who is to undertake the task of re-moulding him may earnestly talk the situation over, would say prayerfully, for, after all, if the Christ spirit is left out nothing remains.

PROBATION

The next step after the boy has shown promise of reform is probation. Here again everything depends on the kind of person appointed to this great responsibility. Men and women of the highest character and of earnest purpose should alone be selected as they have to take up the task and carry it on to completion. The relationship is an even closer and more responsible one than that between the boy and the judge.

In one town a very poor method is followed—the probationer is given a card and told to report at a certain office every Saturday morning—and from ten to twenty would assemble to be given a lecture that was absolutely uneffective. The gathering together of mischievous lads who should be widely separated is wrong—dangerous in the extreme.

If this were the place, much could be said on "the gang" and its terrible consequences to the community. If analyzed it would I think be found that the criminal gang is the natural outcome of acquaintanceships formed in the detention home, the industrial school, etc.—companions in misery—workless—friendless—characterless—what more natural than that they should unite their resources and become professional outlaws?

Massing together of wayward youths is always and everywhere fraught with the greatest danger to Society.

Probation officers should be adequate in number to meet the need, and should be appreciated and encouraged to realize how great the trust that has been reposed in them. Theirs to turn the erring feet toward a worthy and useful career or by indifference confirm the tendency in the wrong direction.

Probation means getting thoroughly acquainted with the lad, his home, and parents, supervising his occupation and employment and staying with the job until all danger is past and the lad is safely tided over the dangers and temptations that beset him.

Child-saving work is surely worth spending thought and money on, for in proportion to its thoroughness will the need for police protection and enlarged prisons be lessened.

As to the proposal that the benefits of the Juvenile Court law should be extended to youths up to eighteen years of age, the time is hardly ripe for that yet. Far better to first of all develop this prevention work for boys under sixteen, for a law not well enforced is worse than no law at all.

JUVENILE COURTS IN ONTARIO

Modern philanthropy expresses itself in child welfare work more extensively than in any other direction and our judges and magistrates are as a rule imbued with the spirit and aim of preventive measures. The Juvenile Court law as passed by the Dominion Parliament twenty years ago, has been proclaimed in only a few of our municipalities, but notwithstanding this there are many magistrates who are at great pains to help young offenders and save them from the natural consequences of their folly. It is a big problem—Crime and its Prevention—and we are still far from the solution as our police record indicates. Still there are many thoughtful people who are constantly and sympathetically studying it, and out of all this will gradually come better home training, discipline, and more efficient means of checking those who deliberately enter on a career of

crime. At present we expect too much from the small amount of money we are willing to invest in reclamatory measures. One probation officer to one hundred police officers is about the usual proportion. But unsatisfactory as conditions may be, they might readily be ten times worse, considering the fast and pleasure-loving age in which we live.

The municipalities in Ontario where the Juvenile Court law has been definitely proclaimed are as follows:

JUDGES OF JUVENILE COURTS IN ONTARIO

H. S. Mott	Toronto
S. Atkinson	Timiskaming
J. A. Makins	County Perth, Stratford and St. Mary's
J. J. A. Weir	Kitchener and Waterloo County
His Honour A. D. Hardy	Brantford and Brant County
J. F. McKinley	Ottawa
J. R. Blake	Galt
A. D. Creasor	County Grey
Rev. G. Quintin Warner	London and Middlesex County
A. D. Bowlby	Windsor, Walkerville and Ford
C. A. Reid	Huron County
G. F. Jelfs	Hamilton
C. S. McGaughey	District of Nipissing
His Honour John S. Campbell	St. Catharines and Lincoln County
Col. J. C. Massie	Dunnville
John C. Milligan	Stormont, Dundas and Glengarry
E. R. Tucker	District of Cochrane.

CORRECTING CHILDISH FAULTS

The wisdom or unwisdom of whipping as a means of discipline and training of children has been much discussed during the past year. There are special occasions when corporal punishment is a necessity, but in the general upbringing of children the emphasis must always be on a patient sympathetic understanding of child-nature and the development of good thoughts and habits by example as well as precept. Children are too often the victims of bad temper and of a hasty decision. They realize keenly the injustice done them and their lives and characters are embittered and hardened by it. Here is an incident of recent occurrence illustrating the two methods.

A boy of nine years in one of our Children's Homes had been repeatedly whipped for theft of small articles, and he only seemed to get worse after each whipping. He was removed from this institution to a private family and his fault explained to the people. Shortly after, the lad stole a penknife and denied taking it. The seriousness of taking things that did not belong to him was pointed out and he was left by himself for a short time with a request that he ask God to help him to do what was right. Then the woman who was taking care of him returned in a few minutes and asked him to say a little prayer; this he did with tears in his eyes and then went and got the knife and handed it back. Since then he has made steady improvement with absolutely no whipping or scolding. He fully realizes his besetting sin and is making a big effort to avoid this and the companion sin of lying. From every standpoint this is the better way of dealing with the boy.

WHERE SEVERITY BEGINS

For the very young, the inexperienced, the first offender, the policy of kindness and patience should be the rule, but of course there is a limit to all this and there comes a time when severity and corporal punishment may be necessary to teach these young people that they cannot continue to do wrong with impunity. One boy who was allowed to go with a warning on eight different occasions simply looked upon the whole procedure as a joke, whereas if he had been given a smart whipping on his third appearance he would not have been so indifferent and defiant.

A young man who is now in the penitentiary stated in a newspaper interview that if when he first started doing wrong he had been given a sharp punishment and put in a room by himself for an hour or two he would never have repeated his offence, but familiarity with Court procedure and acquaintanceship with other youths had confirmed him in criminal ways.

It is necessary to add this explanation since there is frequently a mistake made of continuing the lenient policy when leniency has been clearly proven a failure.

INDUSTRIAL SCHOOLS

There are four Industrial Schools carrying on work in Ontario in addition to the Boys' Training School at Bowmanville. Two of these schools operate under the direction of the Industrial Schools Association, a benevolent organization formed some thirty-five years ago to carry out the provisions of the Industrial Schools Act.

Victoria School for Protestant boys, 245 pupils.
St. John's School for Roman Catholic Boys, 130 pupils.
Alexandra School for Protestant girls, 135 pupils.
St. Mary's School for Roman Catholic girls, 52 pupils.

Pupils are sent to these institutions on the indeterminate plan. They cannot be retained for a longer continuous period than three years, but the average length of stay is from eighteen months to two years. The Act provides that they remain under the guardianship of the school until twenty-one years, and if a lad is not doing well he can be recalled at any time. Maintenance is provided for to the extent of $1 per day for each pupil, half of which is paid by the Government and half by the municipality. From the fund thus created all the expenses of the school are met.

The Industrial Schools Act is one of the best pieces of child-welfare legislation on the Statute Books, and if its provisions were fully observed a great deal could be done to check up the juvenile crime that is so prevalent. It is a well-known fact that many of the worst young criminals in the penitentiary have been graduates of the Industrial Schools, and this is perhaps to some extent due to the failure to properly supervise and follow up boys after their parole from the institution. Fully as much attention should be given to boys on parole as to those remaining in the institution, but on the ground of economy this has not been given the attention it deserves, with the result that un-reformed boys having gained their freedom and become discouraged through lack of employment and loss of reputation, have settled down into a criminal career which ultimately

lands them in the penitentiary. One of these boys when finally apprehended was shown to have committed at least twenty-five serious offences during the time of his freedom; others had similarly bad records—and all this reflected on the work of the school. Probably the greatest reform that should be brought about is a thoroughly efficient system of supervising and assisting boys after their release from these institutions. At the same time it is hardly fair to say that a few conspicuous failures destroy the usefulness of the institution, for it can be said with a reasonable degree of certainty that 75 to 80 per cent. of the boys leaving the Industrial Schools have been improved and helped by their period of training.

CHILDREN'S AID FINANCIAL RETURNS

Place	Receipts	Expenditures	Surplus	Deficit
	$ c.	$ c.	$ c.	$ c.
Algoma and Sault Ste. Marie	19,479 38	19,322 32	157 06	
Brant and Brantford	6,962 92	6,816 84	146 08	
Bruce County			1,347 58	
Carleton and Ottawa	5,952 88	5,598 52	394 36	
Cochrane and Timmins	9,108 73	8,821 37	287 36	
Dufferin and Orangeville	4,060 16	3,502 71	557 45	
Elgin and St. Thomas	14,520 72	13,497 67	1,023 05	
Essex and Windsor				
Thunder Bay and Fort William	7,505 25	7,127 27	377 98	
Frontenac and Kingston	5,027 25	4,991 28	35 97	
Grey and Owen Sound	6,509 67	5,407 47	1,102 20	
Haldimand	5,748 29	5,536 77	211 52	
Haliburton	1,352 27	1,352 27		
Hamilton	14,483 80	13,051 67	1,432 13	
Hastings and Belleville	11,768 83	12,716 51		947 68
Huron	3,693 77	3,305 78	387 99	
Kenora	2,024 21	1,796 07	228 14	
Kent and Chatham	7,083 70	7,375 59		291 89
Lambton and Sarnia	3,278 91	2,763 49	515 42	
Lanark	1,419 49	1,419 49		
Leeds and Grenville	3,794 06	3,758 61	35 45	
Lennox and Addington	2,176 08	398 70	1,777 38	
Lincoln and St. Catharines	6,596 85	6,596 85		
London and Middlesex	11,766 46	16,459 02		4,692 56
Manitoulin	596 61	68 53	528 08	
Muskoka (District)	1,930 46	75 39	1,855 07	
Nipissing and North Bay	6,224 63	6,683 21	458 58	
Norfolk	6,729 64	5,542 11	1,187 53	
Northumberland and Durham	6,322 45	6,072 06	250 39	
Ontario and Oshawa	7,322 55	8,357 61		1,035 06
Oxford and Woodstock	5,778 85	5,778 85		
Parry Sound (East)	515 93	474 95	40 98	
Parry Sound (West)	3,056 05	2,658 85	397 20	
Peel and Halton	5,388 91	5,272 73	116 18	
Perth and Stratford	5,087 95	4,509 54	578 41	
Peterborough	5,744 39	5,153 25	591 14	
Port Arthur	5,441 23	4,959 80	481 43	
Prescott and Russell	8 00		8 00	
Prince Edward County	2,356 96	2,221 18	135 78	
Rainy River District	319 88	156 10	163 78	
Renfrew	3,466 95	3,433 10	33 85	
Simcoe and Barrie	11,408 59	11,408 59		
Stormont, Dundas and Glengarry	2,075 05	1,970 39	104 66	
Sudbury	6,059 17	5,995 40	63 77	
Temiskaming	6,078 09	5,727 47	350 62	
Victoria and Lindsay	4,229 27	4,228 64	63	
Waterloo County	7,622 55	7,286 44	336 11	
Welland (Niagara Falls)	4,171 51	3,886 65	284 86	
Welland (City)	3,012 64	2,340 56	672 08	
Welland (County)	9,393 59	9,218 01	175 58	
Wellington and Guelph	8,080 48	6,957 45	1,123 03	
Wentworth	331 31	296 65	34 31	
York (County)	7,475 00	6,733 60	741 40	
Toronto C.A.S.	92,857 74	116,300 00		23,442 26
St. Vincent de Paul (Toronto)	19,726 19	17,258 99	2,467 20	
Total	403,126 30	412,642 37	23,197 77	30,409 45

CHILDREN'S AID SOCIETIES

LIST OF OFFICERS, 1928

Algoma and Sault Ste. Marie

President, R. H. Knight; secretary, J. P. Reed; treasurer, W. G. Hyland; superintendent, J. P. Reed.

Brant and Brantford

President, E. Cutmore; secretary, Miss Sarah Brown; treasurer, C. Cook; superintendent, J. L. Axford.

Bruce (Walkerton)

President, D. Willoughby Elmwood; secretary, Rev. R. Perdue; treasurer, Miss D. Benton; superintendent, Rev. R. Perdue.

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President, G. A. MacDonald; secretary and superintendent, R. LeHeup.

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Haliburton

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President, C. A. Winters; secretary, J. Fitzpatrick; treasurer, H. S. Dupey; superintendent, A. Beattie.

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Waterloo (Galt)

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Toronto C.A.S.

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St. Vincent de Paul, Toronto

President, J. F. Boland; secretary, Joseph M. Garvey; treasurer, F. J. Walsh; superintendent, M. P. Everett, 469 Sherbourne Street, Toronto.

REVIEW OF ACTIVITIES

In keeping with the trend of public sentiment and under the pressure of new social enactments passed by the Legislature and referred to this office for enforcement, it has been necessary in recent years to greatly increase the working staff of this Branch. Not so long ago we were able to do the work nicely with ten or twelve people—to-day we have a staff of thirty-six and not one has an idle moment. It might be well to mention here just what this large staff represents in the way of results:

First, we have the Children's Aid with its accumulated work of thirty years and its constantly growing problems with the natural development of the country. There are over 30,000 records and each day brings requests for advice, assistance and action for the better protection of children. There are sixty Children's Aid Societies all reporting the work carried on and sending in the commitment papers, reports of visits and general information. This is preventive work of the highest kind and naturally deserves first place.

Four Industrial Schools come under the supervision of this office, and it will be interesting to know that we have here a history statement of every boy or girl sent to an Industrial School during the past twenty-five years. An official visits these schools from time to time and the accounts for Government grant are supervised and recommended for payment. Juvenile Courts to some extent receive attention; many requests are sent in for advice and information as to the best methods of dealing with wayward children.

Legal adoption is now an important branch, as every application must be investigated and recommended by the provincial officer before it is submitted to the County Judge for his final approval. This involves something in the neighbourhood of one thousand applications during the year with considerable correspondence in ascertaining all the facts to arrive at a correct decision.

But overshadowing all the others in its widespread social implications is the branch dealing with the child born out-of-wedlock. When it is understood that in one year over 1,700 cases have been reported and sifted out it can readily be seen how great the task. The unmarried mother, in probably the greatest sorrow and trial of her life, is referred to this branch for advice and relief, and this has been generously given in every case, although it has not been possible to secure action or financial recovery in more than one-third of the cases dealt with. The sum annually collected by this office from putative fathers is now about $100,000 per year. Here again, another big work begins, for the collection and disbursement of this large sum involves many careful inquiries and calls for judgment of the highest kind. This social problem is one that will never be entirely solved as it is fundamental in human nature, but it can be said without fear of contradiction that in no other country in the world has this problem been so earnestly and efficiently attacked and real effort made to produce satisfactory results. Owing to the delicacy of the question very little public reference is made to the work that is carried on, but the fact that there is so little adverse criticism is in itself a compliment, for injudiciously handled, all sorts of bitter opposition and antagonism would soon be encountered. It is a work that is surrounded with many difficulties and is extremely distasteful, and one can only find comfort in the thought of the undoubted good accomplished.

LEGAL ADOPTION

Since the Act was passed in 1921 there have been 4,000 adoptions approved of by provincial officer and County Judge.

During the past year the number of adoptions was 640.

Age of Children Adopted—It is interesting to note that of the 640 children legally adopted during the year, 429 were under seven years of age and 264 under three years of age, clearly indicating that they were adopted with the highest motives. This work has given the utmost satisfaction to both foster parent and the general public. No complaints—no adverse criticism.

The Provincial Officer, who is also Superintendent of the Children's Aid Branch, reviews every application for adoption and certifies that the provisions of the Act are duly observed. Agents throughout the Province give assistance when called upon.

There is no fee in connection with the adoption of a child. It has been suggested that by making a charge of from five to twenty-five dollars for each adoption, a revenue sufficient to defray the cost of the work would be obtained. This was discussed at the last convention of the Association of Children's Aid Societies, and a resolution was passed strongly opposing any charge being made on the ground that a fee would put a limit on adoptions, as it is an entirely voluntary act and if foster parents neglect to apply, the child is the one that suffers.

To illustrate the loss to the child it might be stated that some time ago foster parents died intestate leaving a girl unprovided for who had for nine years occupied the place of a daughter. Distant relatives in the United States received a twelve thousand dollar estate, and this girl who should have inherited, was entirely overlooked. Had she been legally adopted her status as a daughter would have been clearly established.

Changes in Act—In the process of revising the Statutes, a number of changes were made during the past year, and the Act is now known as the Adoption Act of 1927. One change, introduced from the English Act, prohibits the adoption of a child not a British subject. This has proven quite a hardship as several adoptions had to be rejected because parents were subjects of the United States, and in one case a highly appreciated little boy happened to be born in France, thus putting him outside the advantages of this law. A modification of this section may be advisable.

The Adoption Act requires that persons adopting a child must be resident and domiciled in Ontario. Quite a number of applications have been received from foster parents moving out of Canada who have foster children and found difficulty in getting admission for them to the United States. In making application they were required to present adoption papers and these could not be granted since they were removing outside our jurisdiction. To overcome the difficulty the authorities agreed to accept a properly-drawn statement that the foster parents were rightfully in possession of the child and that it would not at a later date become a public charge.

An important feature of the Adoption Act is that proceedings are regarded as private and confidential, as it is the invariable wish of foster parents that the child should not be handicapped in later life by the fact of adoption being broadcasted. No publicity attaches to the application and the Act requires that the

papers should be filed away in a sealed envelope and only opened for inspection on the Order of the Judge or the provincial officer.

Too much cannot be said as to the value and importance of this legislation. It has been a boon to many citizens.

ADOPTION STATISTICS

NOVEMBER 1, 1926, TO OCTOBER 31, 1927

	Children's Aid Wards.	Soldiers' Aid Wards.	Other Organizations.	Children of Unmarried Parents.	Orphaned Children.	One Parent Living.	Both Parents Living.	Adopted a Second Time.	Over 21 Years of Age.
November, 1926...	44	2	.....	19	.....	7	8	1	.....
December, 1926...	32	9	.....	26	.....	5	2	.....	.....
January, 1927...	24	1	2	14	2	3	4	.....	.....
February, 1927...	28	2	.....	26	.....	11	6	2	2
March 1927...	23	1	1	10	.....	3	7	.....	.....
April, 1927...	25	3	2	33	6	6	3	.....	1.
May, 1927...	24	4	2	27	8	9	5	.....	.....
June, 1927...	13	4	.....	17	.....	4	2	.....	.....
July, 1927...	1	.....	.....	.....	.....	.....	1	.....	.....
August, 1927...	3	.....	.....	1	1	.....	1	.....	.....
September, 1927...	11	.....	.....	7	2	13	2	.....	2
October, 1927...	11	.....	.....	12	1	6	2	.....	1
	239	26	7	192	20	67	43	3	6

CHILDREN OF UNMARRIED PARENTS

This important social legislation has been steadily developing and is meeting with increased interest and support on the part of social and welfare workers generally. In April, 1927, following the work of the Statute Law Revision Committee the Act passed in 1921 was repealed and the Act of 1927 placed on the Statute Books. While the changes made in the law have increased the work of administration it is felt they will greatly strengthen its enforcement. Forms are being prepared to facilitate the carrying out of the new sections.

Investigations

There were 1,724 cases reported during the year ending 31st October last, an increase of nineteen over the previous year. Schedule "A" shows how these were dealt with. Of this number 613 were investigated in Toronto by the provincial officer, the remaining investigations being carried on by our local officers situated in each county and district town of Ontario. We again wish to express our appreciation of the co-operation of the social organizations, maternity homes, legal and medical professions, newspapers, the police department, to all of whom we are indebted in one way or another for assistance in the administration of the Act.

Settlements

The duty of the Provincial Officer is to locate and interview the alleged father, endeavour to secure a settlement by agreement or Court order and where successful, make collections thereunder. Outside of Toronto these men are approached by our local officers and in Toronto by two inspectors attached to the provincial officer's staff. A number seek to evade their obligations by leaving Ontario and frequently go to Quebec or the Western provinces. The majority however, drift to the States (particularly the border cities of Detroit and Buffalo) where, if we are able to provide the street address, expert social workers are usually able to locate them and report their attitude towards settlement, sometimes serving them with Court papers. This is true also of Quebec, while in the West we are assisted by Government departments who use the services of the North-West Mounted Police in getting reports. Once outside this Province, however, the task of securing settlements is rendered much more difficult.

Agreements

There were 240 agreements entered into with the Provincial Officer during the year, some being for expenses and weekly maintenance and others for lump sum settlements. The rate of maintenance in most instances is from $3 to $5 per week and the majority of cash settlements run from $500 to $800. These agreements do not now call for admission of paternity and where default is made are no longer proof of paternity but merely *prima facie* evidence.

Private agreements, forty-four in number and totalling, $15,009.75, were filed with the provincial officer. Such agreements are made between the parties and approved by the Judge. The provincial officer does not take any responsibility for these nor does he collect the money, which formerly was paid direct to the mother and under the new Act goes to the Public Trustee or as directed by the Judge, thus tending to ensure its proper use for the benefit of the child.

In addition fifty-two private settlements, totalling $9,770.30, were made without agreement of any kind, so far as can be ascertained. Such settlements are sometimes effected as the result of negotiation between the parties interested, possibly with the assistance of social workers, friends or relatives, and sometimes as a result of interviews by our local officers. They frequently cover payment of expenses only or small lump sums, and are generally made where corroborative evidence is too weak for Court action and the best settlement obtainable is accepted, or where the mother does not wish action taken.

Other settlements, fifty-eight in number, were made in cases in which we have been unable to secure information as to the amount paid.

Court Orders

An affiliation order is applied for where the mother appears to have reasonable corroboration of her story and the alleged father refuses to settle and also where collections are in arrear under our own agreement. One hundred and eleven such orders were made during 1927. Our cases come before the District or County Court Judges, except in Toronto where they are heard by the Juvenile Court Judge. In most instances the crown attorneys act for the provincial officer, although a few of our local officers conduct the court work themselves, and occasionally local solicitors are employed. The father may now be directed to pay legal costs.

In Toronto forty-one orders were made varying from $1.50 to $5 per week.

Appeals

Leave to appeal was granted in five cases during the year. Of these appeals, three were dismissed, one abandoned and a $400 settlement made, and one is pending. Another appeal standing over from 1926 was dismissed. Show-cause summons actions at once follow the dismissal of appeals, which in most cases are successful. The Attorney-General's Department represents the Provincial Officer in the Appellate Court. Under the new legislation leave to appeal must be applied for to the Appellate Division by leave of a Judge of the Supreme Court.

Collections

All moneys payable under Court orders and agreements with the Provincial Officer are collected by the Central Office at Toronto. The total receipts, which include over $31,000 paid in cash, amounted to $95,274.72 with disbursements of $93,395.11. Cheques go out monthly to the mother or whoever may be caring for the child. A collector is kept busy on Toronto cases, and our local officers frequently aid us in locating and interviewing the men living in other parts of the Province who do not respond to letters demanding payment. Schedule "A" gives a comparative statement of receipts and disbursements since the year 1921 when the Act first came into force.

Varied Agreements and Orders

After collections have been made for some time under an agreement or order, a cash settlement is sometimes considered desirable. Very often a reduced or increased rate of maintenance is applied for. Where both parties interested consent, the agreement is then varied by the provincial officer, or in the case of an order, application is made to the Judge for this purpose. Nine agreements and seventeen orders have been so varied.

Court Actions on Default

Default under an agreement results in a further application to the Court for an affiliation order. The Judge may now, where fraud is shown or upon discovery of new evidence, allow the case to be re-opened in which event such agreement is only used as additional corroboration. Thirty-five orders to enforce agreements were made during the year. Where there is default under an affiliation order a show-cause summons is applied for. If the father does not appear upon personal service having been made or it is shown he has deliberately disobeyed the terms of the order, application may be made for his committal to gaol. Seventy-five show-cause summons actions were taken in 1927.

Statistics

Our statistics deal with nationality, religion, occupation and other facts relative to our cases. It is not always possible to get complete data but Schedule "B" contains interesting information.

Child Placing

Every effort is made to keep mother and child together for the nursing period, and indefinitely where the circumstances warrant it. One thousand three hundred and twenty-nine children were reported as being with the mother during 1927.

Where unable or unwilling to keep her child, the mother is referred to The Children's Aid Society of the city or county in which she has domicile to have it listed for adoption. Frequently the local officers of adjoining counties co-operate in finding foster homes. During the year legal adoption has been granted in seventy-one cases of children born out of wedlock, and forty-four children are still in foster homes, legal adoption being under consideration.

If the mother desires to keep her child but is self-supporting, and her work is such that she cannot have it with her, our local officers and social agencies find approved boarding homes. One hundred and twenty-nine children have been so placed during 1927.

Application to have the child committed as a ward of the local Children's Aid Society is made where the mother has no means of providing for it. If mentally and physically fit, an effort is made to find a foster home. Ninety-nine children have been made wards during the year.

Of our 1,724 cases the deaths of only fifty-two children are reported, which is a remarkably good showing in view of the heavy infant mortality of previous years. Medical certificates are obtained where possible showing causes of death.

Repeaters

It is regrettable to state that 193 mothers came under this hearing in 1927. Quite a large percentage of these are feeble-minded and constitute one of our most serious problems. Where they have only been a short time in the country, deportation is considered, while those having domicile here are in many instances placed under supervision of some kind.

SCHEDULE "A"

CHILDREN OF UNMARRIED PARENTS' ACT

Comparative report showing number of cases dealt with from July, 1921, to 31st October, 1927.

1921		
July 1st, 1921, to October 31st, 1921	102	cases were dealt with.
1921-1922		
October 31st, 1921, to October 31st, 1922	672	" " " "
1922-1923		
October 31st, 1922, to October 31st, 1923	1,162	" " " "
1923-1924		
October 31st, 1923, to October 31st, 1924	1,205	" " " "
1924-1925		
October 31st, 1924, to October 31st, 1925	1 347	" " " "
1925-1926		
October 31st, 1925, to October 31st, 1926	1 705	" " "
1926-1927		
October 31st, 1926, to October 31st, 1927	1,724	" " " "
Total	7,917	

N.B.—The above statement indicates a yearly increase in the number of cases brought to attention, rather than any increase in immorality.

Statement showing number of cases dealt with during last fiscal year.

From October 31st, 1926, to October 31st, 1927	1,724	cases were dealt with.
Of these	505	have become financial cases.
"	799	have been closed.
"	420	are pending.
Of the financial cases	240	were settled by agreements with P.O.
" " "	111	by Court Orders.
" " "	44	by private agreements.
" " "	52	by private settlements without agreement.
" " "	58	by private settlements amount not stated.
Of the closed cases	243	cases no action was desired.
" " "	33	were dismissed for lack of corroborative evidence.
" " "	247	were closed for lack of corroboration.
" " "	208	cases the man disappeared.
" " "	68	cases the couples married.

Comparative statement showing receipts and disbursements from July, 1921, to October 31st, 1927.

	Receipts	*Disbursements*
1921		
July 1st, 1921 to October 31st, 1921	$691 00	$40 00
1921-1922		
October 31st, 1921, to October 31st, 1922	27,066 81	13,954 09
1922-1923		
October 31st, 1922 to October 31st, 1923	57,113 03	38,663 66
1923-1924		
October 31st, 1923, to October 31st, 1924	73,258 76	57,698 63
1924-1925		
October 31st, 1924, to October 31st, 1925	86,105 00	71,908 60
1925-1926		
October 31st, 1925, to October 31st, 1926	88,353 80	79,540 90
1926-1927		
October 31st, 1926, to October 31st, 1927	95,274 72	93,395 11
	$427,863 12	$355,200 99

SCHEDULE "B"

Ages

Women

Under 16	111
17-20	539
21-30	489
Over 30	125

Men
(Record not kept.)

Nationality

	Women	*Men*
Canadian	821	673
English	190	119
Scotch	130	78
Irish	42	49
Foreign	94	109

Religion

Protestants	993	720
Roman Catholics	276	248

Occupation

Domestic and waitresses	578
Factory	204
Stenographers and clerks	100
Miscellaneous	258
Housewife	36

Married or Single

Single	1,513	767
Married	197	293

N.B.—The above figures are only approximate as there are a number of cases in which we are unable to get any data.

CONCLUSION

In conclusion, it might be said that the work carried on by the Children's Aid Branch has only been possible through the devoted volunteer service given by thousands of citizens in many directions. Public sentiment is the strongest factor in the successful operation of any social law, and this has always been with the Children's Aid Society in its efforts to safeguard and enrich the child life of the Province. To make the work still more complete we would ask those who have comfortable homes and no children to consider seriously the adoption of a little boy or girl and thus add to their own happiness in addition to performing an act of the highest altruistic service.

J. J. Kelso.

SECOND REPORT

OF THE

LIQUOR CONTROL BOARD

OF

ONTARIO

From November 1st, 1927, to October 31st, 1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

ONTARIO

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1929

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CANADA

Liquor Control Board
of Ontario

110 University Avenue,
Toronto 2,
January 25th, 1929.

To Colonel the Honourable W. H. Price, K.C.,
Attorney-General, Province of Ontario,
Parliament Buildings, Toronto 5, Ontario.

Sir:—

The Liquor Control Board of Ontario has the honour to submit herewith its second report for the year ending 31st of October, 1928.

Financial Statement

Forwarded herewith is the balance sheet and profit and loss account prepared and certified to by Messrs. Clarkson, Gordon, Dilworth, Guilfoyle and Nash, who conduct a current and extensive audit of all the Board's activities.

On referring to the balance sheet, it will be noted that the amount of fixed assets was $210,732.17, this amount being made up of the cost less depreciation of the premises at 154 Wellington Street West, Toronto, and the land purchased in Fort William and on which a warehouse is now being erected. Included also is the value of fixtures and alterations in rented premises, furniture and equipment less the amount written off.

Current assets amount to $3,737,069.09, being composed of the following items:—

Cash on hand	$120,041 43
Accounts receivable made up of: Hospital purchases, 5 per cent. commission on direct brewery and brewery warehouse sales, duty recoverable items due us from Customs Department, freight claims	84,335 85
Inventories of liquors and supplies	3,502,880 33
Prepaid insurance and rental	29,811 48

The liabilities are shown as $3,339,952.69. This amount is composed of the following items:—

For liquors and supplies	$3,296,862 40
Miscellaneous accrued charges (The principal item being accrued rents, $9,997.17)	11,735 95
Due Provincial Treasurer (For permit sales and confiscated stock)	31,354 34

It will be observed that a surplus is shown of $607,848.57, being the balance of the net profits for the fiscal year after paying the Provincial Treasurer the sum of $7,225,000.00. This surplus is represented by our assets, the amount thereof being the excess of assets over liabilities. It does not, of course, take into consideration contingent liabilities which amount to $4,316,025.24. These contingent liabilities, while representing matters that have to be set up, are nevertheless not a fair charge on the operations of the Board, for the year that just closed.

The profit and loss account shows sales of $48,995,591.19. These sales include sales made through the Liquor Control Board stores and warehouses and the sales made from breweries and brewery warehouses. The amount sold by the breweries and brewery warehouses being $14,649,666.00 as against $34,345,925.19, the amount sold by the Board.

The statement shows a gross trading profit of $9,869,020.12 and a net trading profit of $7,019,944.39. This sum was augmented by other revenue to the extent of $808,143.93, resulting in a total amount of $7,828,088.32, which is carried to the balance sheet.

For purposes of comparison, the percentages that the cost of stock sold, miscellaneous earnings and expenses and other revenue, bear to the total of gross sales are given for the year 1928 and for the five months' operation in 1927.

Besides the balance sheet and profit and loss account, statements showing summary of sales and the Board's expenses of administration and operation for the twelve months are also attached. Again for the purpose of comparison, the individual percentage which all these expenses bear to the total sales is given for both periods on the expense statement.

In addition, all Liquor Board stores, brewery warehouses, breweries, wineries, and all the companies operating distilleries in Ontario are set forth on Schedule III attached and a classification of permit and license sales appears on Schedule IV.

Stores

Thirty-nine new stores were opened during the year. They were:—

	Location		Date of Opening
Store No.	39—King Street	Cobourg	Nov. 4th, 1927
"	25—King and Sydenham Streets	Dundas	Nov. 10th, 1927
"	88—River Street	Paris	Nov. 24th, 1927
"	89—Main, Mattawa-Pembroke Highway	Mattawa	Dec. 1st, 1927
"	87—Front Street	Sioux Lookout	Dec. 6th, 1927
"	90—68 Simcoe Street North	Oshawa	Dec. 12th, 1927
"	29—Burford Street	Wiarton	Dec. 13th, 1927
"	86—Queen and White Streets	Dryden	Dec. 15th, 1927
"	91—29 Duncan Avenue	Kirkland Lake	Dec. 19th, 1927
"	92—71 4th Avenue	Englehart	Jan. 12th, 1928
"	30—West Victoria Street	Walkerton	Feb. 9th, 1928
"	19—Rogers Road and Blackthorn Avenue	Toronto	Feb. 13th, 1928
"	93—Gilmour Road	Fort Erie	Feb. 22nd, 1928
"	95—21 Water Street North	Galt	Mar. 1st, 1928
"	94—Bridge Street North	Eganville	Mar. 15th, 1928
"	97—Dundas Street	Napanee	April 5th, 1928
"	96—112 Main Street	Deseronto	April 18th, 1928
"	98—22 Main Street	Alexandria	April 23rd, 1928
"	100—23 Albert Street	Thorold	May 5th, 1928
"	99—Emard Street	Embrun	May 8th, 1928
"	16—106 Richmond Street West	Toronto	June 6th, 1928
"	101—48 Main Street	Grimsby	June 9th, 1928
"	103—Tudhope Street	Espanola	June 13th, 1928
"	105—Concession Street	Tamworth	June 13th, 1928
"	102—Muskoka Street	Gravenhurst	June 20th, 1928
"	104—Main Street	Thessalon	June 20th, 1928
"	107—Main Street	Palmerston	June 23rd, 1928
"	106—Main Street	Huntsville	June 28th, 1928
"	108—Woodward Avenue	Blind River	July 7th, 1928
"	109—Ramsay Street	Amherstburg	July 12th, 1928
"	110—46 Wallace Street	Wallaceburg	Aug. 2nd, 1928
"	111—Bedford Street	Westport	Aug. 10th, 1928
"	115—43 King Street North	Waterloo	Aug. 27th, 1928
"	114—Corner 4th Street and Broadway	Rainy River	Aug. 28th, 1928

STORES—Continued

Location		Date of Opening
Store No. 116—Arthur Street	Elmira	Aug. 29th, 1928
" 112—Government Road	Kapuskasing	Sept. 5th, 1928
" 113—Opongo Street	Barry's Bay	Sept. 6th, 1928
" 117—Birch Street	Chapleau	Sept. 20th, 1928
" 118—Young Street	Capreol	Oct. 15th, 1928

The total number of stores in operation at the close of the year was 117.

BREWERY WAREHOUSES

27 Brewery Warehouses were opened during the year, as follows:

Location		Date of Opening
897 Queen Street East	Toronto	Nov. 19th, 1927
King Street West	Dundas	Nov. 26th, 1927
497 James Street North	Hamilton	Dec. 8th, 1927
426 Bank Street	Ottawa	Dec. 12th, 1927
223 Dalhousie Street	Ottawa	Dec. 12th, 1927
161 King Street West	Oshawa	Dec. 14th, 1927
14 St. Paul Street	St. Catharines	Dec. 15th, 1927
9 Market Street	Thorold	Dec. 19th, 1927
Colborne Street	Oakville	Dec. 17th, 1927
Front Street	Sioux Lookout	Dec. 21st, 1927
Burford Street	Wiarton	Dec. 19th, 1927
35 Goodfish Road	Kirkland Lake	Jan. 14th, 1928
Durham Street	Walkerton	Feb. 11th, 1928
39 Dickson Street	Galt	Feb. 15th, 1928
Muskoka Road and Main Street	Gravenhurst	Feb. 14th, 1928
Mill Street	Napanee	April 5th, 1928
Main Street	Alexandria	April 7th, 1928
Nelson Street	Wallaceburg	April 14th, 1928
1395 Gerrard Street East	Toronto	April 14th, 1928
Goderich Street	Port Elgin	April 21st, 1928
2 Marlborough Street South	East Cornwall	May 15th, 1928
1 Main Street	Morrisburg	May 23rd, 1928
2420 Dufferin Street	Fairbank	June 15th, 1928
1145 Yonge Street	Toronto	July 7th, 1928
Main Street	Palmerston	Aug. 4th, 1928
Regent and King Streets	Niagara-on-the-Lake	Sept. 7th, 1928
3333 Danforth Avenue	Toronto	Sept. 12th, 1928

The total number of brewery warehouses in operation at the end of the year was 102. It should be noted that there are thirty-seven breweries producing and selling beer in Ontario and that in addition to this, five other Canadian breweries, outside of the Province, also are represented in the brewery warehouses.

The Board is convinced that this number of breweries and the number of distilleries now authorized are sufficient and more than sufficient to cover the Ontario field and that no new undertakings should be incorporated either by Dominion or Provincial authority.

WINERIES

The number of native wineries operating is fifty-one, all of which have been properly licensed by the Board.

SALES

1928 has been a prosperous year. The number of tourists has largely increased. The large Fairs and Exhibitions were particularly well attended, bringing many strangers to Ontario. The sale of liquors has increased. In

the five months' period of 1927, compared with the like period of 1928, the results were as follows:—

	1927	1928	Increase	Per cent.
Domestic beer	$6,249,113 86	$9,382,319 84	$3,133,205 98	50.
Imported beer	118,302 45	125,101 20	6,798 75	5.5
Wines—Canadian	140,531 20	469,425 80	328,894 60	234.
Wines—imported	397,578 14	704,876 60	307,298 46	77.2
Spirits	10,628,133 76	12,899,943 82	2,271,810 06	21.3
	$17,533,659.41	$23,581,667 26	$6,048,007 85	34.5

The consumption of spirits varies. Periods of prosperity increase it. It decreases with periods of decreased purchasing power. Over and above all this, the teaching of the principles of temperance and the advance of moderation and self-restraint always plays the most important part. After the test of prohibitory laws, it may be affirmed that moral advance and the personal acceptance of voluntary limitation, if not voluntary abstinence, is the real solution of evils arising from the abuse of intoxicating liquors.

The Dominion statistics showing the consumption of spirits (Canadian production) for Ontario are of interest.

Year	Distilled liquors entered for consumption in Ontario
1912	1,822,450 gallons
1913	1,935,386 "
1914	1,851,470 "
1915	1,670,559 "
1928	1,049,825 "

As Prohibition became effective in 1916 and the unrecorded and unrecordable activities of bootleggers commenced on a very large scale—carried on by men who became very affluent—statistics for intermediate years are not of much value. A great quantity of liquor was brought into Ontario from other Provinces and as well as liquor produced in Ontario, illegally sold.

The great activities brought about largely by large railway development still persisted in 1913, although signs of financial depression were evident.

1915 was a year of depression. The Great War was in progress and Canada had not then developed her war mercantile activities.

A decrease of 264,827 gallons or over 13.68 per cent. will be noted, but many of Ontario's population had already left the country on war activities.

The regular compilation of trade statistics is based on Dominion trade only, but commencing with the fiscal year 1918, a special compilation of Provincial trade has been made. Prior to that date, the figures showing the volume of imported distilled liquors released for consumption in Ontario are not available.

To note the consumption of liquors including the imported, reference must be made to the totals for the whole country. Those for 1915, a year of reduced volume, are taken.

	1915	1928
Distilled liquors (domestic) entered for consumption in Canada	4,021,091 gals.	1,896,357 gals.
Distilled liquors (imported) entered for consumption in Canada	2,921,839 "	2,457,131 "
Excess of 1915 over 1928	.....	2,589,442 "
	6,942,930 "	6,942,930 "

The result of these statistics then shows a reduction in the consumption of domestic distilled liquors in Ontario as between 1915 and 1928 of 620,734 gallons or 37 per cent. and for Canada including imported liquors a reduction of 2,589,442, the same percentage. Further examination is, however, necessary. The use of non-potable alcohol, with the advance of the manufacturers and the arts, has very largely increased since 1915. The statistics for 1915 include non-potable with the potable. What the total use of non-potable alcohol was in 1915, the Board has been entirely unable to ascertain, but it was negligible compared to the 1,069,622 gallons of non-potable spirits entered for consumption in 1928.

Again in 1915, none of the liquors exported into the United States were entered for consumption in Canada. It was all exported under bond without release for consumption. To-day, all liquor exported to the United States is liquor already released for consumption in Canada. Exports to the United States in 1928 were 1,148,000 gallons.

If the statement be recast giving effect to this export and on the violent assumption that there has been no increase in the use of non-potable alcohol, the result would be:—

	1915	1928
Distilled liquor (domestic) entered for consumption in Canada	4,021,091 gals.	1,896,357 gals.
Non-potable liquor entered for consumption in Canada	.....	1,069,622 "
Distilled liquor (imported) entered for consumption in Canada	2,921,839 "	2,457,131 "
	6,942,930 "	5,423,110 "
Less amount of liquor entered for consumption in Canada, but exported to the United States	None	1,148,000 "
	6,942,930 "	4,275,110 "
Excess of 1915 over 1928	.....	2,667,820 "
	6,942,930 "	6,942,930 "

The unit of alcoholic consumption again depends on population. Ontario's population was estimated by the Dominion Bureau of Statistics as 2,681,070 for 1915 and as 3,229,000 for 1928. The estimate for the Dominion for 1915 was 7,862,000 and for 1928, 9,658,000.

In view of the increase of population and the fact that 1928 was a very prosperous year and 1915 much the reverse, the official figures indicate a very large decrease in the consumption of alcoholic liquors.

The results, however, must be qualified by certain considerations:—

First.—The exports of 1915 were made in bond and there was no short-circuiting in Ontario of liquors presumed to be for export. This has taken place to an amount entirely unascertainable in 1928. It is hoped that the new regulations of The Honourable The Minister of National Revenue, for the better control of the export business, will relieve this short-circuiting. In proportion to the efficacy of such Regulations an increase may be expected in the gallonage entered for consumption in Ontario.

Second.—A large amount of liquors were stocked by people, who could afford to stock them, prior to Prohibition. While in the majority of cases those supplies have been exhausted, they are not entirely exhausted and to the extent that they still exist it will be reasonable to suppose that the total entered for consumption in Canada would proportionately increase after their complete disappearance.

Third.—While bootlegging on a grand scale by the big bootleggers could be and has been stopped and their great profits now enjoyed by the Province, there is still far more bootlegging on a small scale than there was in 1915,—far more "swamp" or "moonshine" whisky and far more deleterious substitutes for alcohol than in 1915. It should also be noted that for Ontario alone the filings with the Department of Excise under which Home Brew beer may be produced reached the great total of 74,663 as of October 31st, 1927. The Board have been unable to secure later figures from Ottawa.

Illegal practices once gaining sway and the safer methods of production and distribution worked out, the process of ending them is slow and difficult.

The lessening and ultimate cessation of these illegal practices will again tend to transfer their unrecordable volume to the official figures and thereby increase them; certainly to the extent liquor has been short-circuited and illegally produced in the Province, the official figures fall short of showing the actual consumption.

The large reduction shown in gallonage will undoubtedly surprise many in view of the large sales of your Board. The reason, however, of any misunderstanding is very plain. The Board's results are in dollars and indicate retail prices and there has been a very great increase in the price of whiskies and other spirits. The Dominion tax has risen from $2.40 per gallon of alcoholic content on imported liquors to $10.00, while the Excise tax on domestic liquors has been raised to $9.00. In addition to this, the Dominion Sales Tax of three per cent. is now applicable. As a result the public to-day pays $2.75 for the same domestic whisky they purchased in 1915 for 75 cents per bottle, while the standard Scotch brands which formerly sold for $1.00 per bottle are now sold for $3.55.

An equal dollar public sale, gross total, in 1915 to a like gross total in 1928 would mean that approximately three and one-half times as many gallons would have to be sold in 1915 as in 1928.

The Board is of the opinion that too much reliance cannot be placed in statistics in view of the illegal practices that have grown up and which are now in process of eradication. No one can have any definite information of what the consumption of liquor has really been of recent years.

Alcohol

The Board has felt obliged to change the regulations affecting the sale of grain alcohol. Formerly, grain alcohol was never regarded as a beverage in Ontario, although used as a base for beverages in Latin and other countries where its strength and dangerous qualities were well known. Its use in Ontario was formerly confined to medicinal, scientific and manufacturing purposes. When your Board commenced to function, it found that a large sale had been carried on by the Ontario dispensaries. In the year ending October 31st, 1926, and for the seven months' period ending May 31st, 1927, 25,253 gallons had been sold by the dispensaries. In addition to that, large sales were being made by older established Government Commissions. The Board therefore listed alcohol following the practice which had grown up. Your Board, however, became convinced that by far the greater part of this alcohol was being used for beverages and not for medicinal purposes and stopped its general sale. It can now only be obtained for medicinal, scientific or manufacturing purposes. Its strength is 65 per cent. overproof, or in other words, it contains 94.2 per cent. by volume of absolute alcohol, equivalent to 165 degrees of proof spirits.

The Board's conclusion has been borne out by the result. General sales stopped with June 30th of the current year. The fortnightly return of sales in the Board's stores shows that for the fortnight ending June 30th, 534 cases of 65 per cent. overproof alcohol were sold. For the fortnight ending July 14th, that sale had dropped to ten cases. The result of this fortnight is not out of line. Eight fortnightly periods have elapsed since the change came into effect. Taking eight fortnightly periods before the change became effective, the total sales amounted to 4,755 cases of 65 per cent. overproof alcohol, while the sales for the like number of periods after the change, only amounted to 123 cases. There was then under former conditions, an average fortnightly sale of 595 cases, as against 16 cases since the change became effective.

It was forcibly represented to the Board that should the sale of 65 per cent. overproof alcohol be stopped and large sales by other Commissions continued, in view of the fact that a large number of the public had become used to this intoxicant, bootlegging in alcohol would become rampant. This situation has been met by the sale of "Whisky Blanc," which is simply grain alcohol reduced to a strength of 48 per cent. underproof—a reduction of 113 degrees. The character of the drink remains as it was, but its dangerous strength which had resulted in deaths, entirely removed.

Grain alcohol, proper and necessary as it is for medicinal purposes, is extremely dangerous. The average strength of whisky sold to-day is 25 per cent. underproof or 75 per cent. of proof spirits by volume. Alcohol contained therefore, 120 per cent. more alcoholic content than whiskies and was more than twice as intoxicating. The Board's statistics demonstrate beyond all question the alarming extent to which this dangerous article had been subverted to beverage purposes. Its sale was also a great help to bootlegging, as three or more bottles of whisky could be and were made out of one bottle of alcohol.

Dominion Taxation

Dominion taxation still continues to be the greatest expense attendant on your Board's operations. These taxes comprise Custom's duties, Excise rates, malt duties, beer gallonage and Sales Tax. During the period now closed, the total amount paid to the Dominion under the above headings, exceeded $15,500,000.00. It will be observed, therefore, that in respect of the activities of but one province, the Dominion receives from the liquor business a sum more than twice the net profits of this Board. On a bottle of cheap Canadian whisky, which we sell to the public of Ontario for $2.30, the Dominion taxes are $1.15, while on a bottle of imported Holland's Gin, selling to the public for $2.60, the Dominion taxes amount to $1.50.

The standard carton containing two dozen pints of beer sells for $3.25 less a rebate of 72 cents for the returned empties resulting in a net cost to the public of $2.55. The Board's charges on the carton are 5 per cent. or 16¼ cents., while the Dominion's taxes on the carton amount to 42 cents.

Permit Supervision

The social side of the Board's work has been largely extended. It will be entirely impossible to finally achieve proper results without the co-operation of social workers and others desirous of improving the social conditions of the people. The Board is in the happy position to-day of having co-operation from a number of associations and people who have devoted their lives in the great field of social reform, as well as from family sources.

Many permits have been cancelled. In the opinion of the Board, permits ought to be cancelled, not only in cases where liquor has been abused, not only in cases where liquor may be purchased for resale, but also in all cases where the purchases of liquor are made at the expense of the home. The purchase of liquor ought to come and must come after, and a long way after, the necessities of life, and adequate duty to dependents, if proper living conditions are to be maintained.

Further, vendors and store staffs have been enjoined to render co-operation in the putting down of abuses of the permit privilege, to apply their local knowledge, to collect doubtful permits, and from time to time to invoke Head Office assistance in dealing therewith. It has been emphasized to them that the keynote of the law is "control," not sale, that moderation is the best way to support the law, and that satisfactory service by a store is best proved, not by volume of sales, but by prevalence of good social conditions in the surrounding community and absence of drunkenness and of complaints from neglected dependents.

Many hundreds of interviews have contributed wholesomely to the checking of excess. Constantly improving "team work" throughout our organization has resulted, with salutary effects, and we are glad to believe it is recognized as a rule by those affected that these measures are prompted not by caprice but by the desire to assist the good working of the law through inculcating moderation and good sense on the part of permittees.

It is desired that the public be made aware of the prominence that is being given to the work thus initiated and hence the Board gratefully acknowledges the assistance of those who, whether they are in sympathy with the Act or not, nevertheless place the good of those requiring assistance above all other considerations and have given the Board the intimate details which outside of the family itself, can only be known to the clergyman and the social worker.

As a result of this co-operation, the number of cancellations of permits has increased rapidly. During the initial five months' period ending October 31st, 1927, cancellations totalled 615, with four orders of interdiction. With the fiscal year ending October 31st, 1928, the number of cancellations has risen to 5,118 with twenty orders of judicial interdictions and the examination of 391 cases which have been so adjusted as to limit permittees without cancellations. At the close of the fiscal year, there were some 738 cases being investigated with a view of cancellation or other proper discipline.

It has been said that by cancelling permits, the Board is only playing into the hands of the bootlegger. In some cases, the bootlegger is probably assisted through cancellations, but on the other hand, the campaign against the bootlegger proceeds actively and it is the opinion of the Board that abuses and excesses ought never to be sheltered by a permit after the Board is seized of the facts.

Dangerous Substitutes

The police are active in their prosecution of drunkards. The casual drunkard is not simply released when sobered, in the morning, as was generally the case, but all cases of drunkenness known to the police are pressed to trial. Although drunkenness may not be much in evidence in the streets, at the fairs and exhibitions and although months may pass before the general citizen observes a single case of drunkenness, nevertheless drunkenness still exists as is shown by police statistics.

Many of the convictions for drunkenness are the result of practices which have sprung up in the last few years. The social workers who attend the police courts and are active in the work of regenerating the unfortunates therefrom, show that a very large number of those convicted for drunkenness became drunk on rubbing alcohol; others on "canned heat."

Rubbing alcohol is a compound which has been specially authorized by Dominion authority. The objects which led to the introduction of rubbing alcohol were entirely laudable. Under Dominion law, the tax on alcohol domestically produced, which was $9.00 a gallon, 100 per cent. proof spirits, became $14.85 in the case of the regular grain alcohol which was used for medicinal purposes as that alcohol, being of a strength of 65 per cent. overproof, was of course, taxed on the extra alcoholic content. The motive for the cheap rubbing alcohol was to supply those who could not afford to pay the high price for pure grain alcohol with a cheap substitute. The Dominion levies no tax whatever on its alcoholic content, but with a view of rendering it non-potable and preventing it coming into direct competition with alcohols which had paid the high Dominion tax, it had to be manufactured containing such ingredients as in the opinion of the Dominion chemist rendered it too nauseous for beverage purposes. Since 1922, slowly but surely, there has grown up a group of people who, desiring to have the effect of complete drunkenness brought about just as easily and just as cheaply and quickly as possible, have so trained their palates—that this nauseating mixture—to those unaccustomed to it—is drunk freely by them. In one large city, fifty per cent. of all the drunks consisted of the so-called rubbing alcohol addicts. The question has been taken up with the Ottawa authorities who are trying out other prescriptions which, short of poisoning and destroying the effect of the proper application of the rubbing alcohol, will render the mixture so unpalatable as to be undrinkable. The Board is of the opinion that these attempts will fail and is now considering treating the sale of this rubbing alcohol which is carried on by the druggists along the lines of sales of noxious drugs.

Although not so large in number, there are also drunkards who use the alcohol extracted from "canned heat" and "home brews" fortified by alcohol. None of these intoxicants are obtainable in the Board stores.

Export of Liquor

Prior to the enactment of the so-called Volstead Act of the United States, liquor was exported to that country subject to duty, but a bond of double the amount of the duty was taken. This bond, in the ordinary course of business, was discharged on the receipt of proper evidence of the arrival of the liquor in the United States. Under these conditions, probably no liquor sold for export ever returned to the Province. Under existing conditions, it is of course impossible for the exporters to receive the required certificates of landing in the United States. As a result, the practice has sprung up of exporting to that country, duty free liquor, that is, liquor on which all Dominion taxes, whether Customs, Excise or Sales Tax, has been paid. The business is carried on under the shelter of what is known as B-13 forms. These forms may be obtained by anyone desiring them. They are looked upon as evidencing the intention to export.

Under the Dominion law, liquor may be shipped into and out of the Province, but may not be shipped into the Province for consumption or sale in the Province, unless it be addressed to the Board.

Irregularities were found to exist in connection with the so-called export

business. Liquors which were, as the term is, short-circuited, were sold in Ontario and seized at various points. The conditions were particularly bad in the Windsor district; a number of seizures were made and prosecutions conducted to a successful termination, but, much more important, the real short-comings of the system—the methods by which liquor was short-circuited and sold for consumption in the Province—were made manifest.

The whole question was taken up by your Board with the Honourable the Minister of National Revenue, whose Department controls the Export business. He advised your Board that under the law, as it stood, he could not refuse Export clearances to the United States, and that any change in the law would have to be a matter of Government policy and was not a matter of Departmental administration.

In order to reduce the irregularities which existed and, if possible, to remove them, the Honourable the Minister of National Revenue has made a large reduction in the number of docks in the Windsor district from which export can be made. While loadings could take place and did take place in the past without any supervision whatever, the loadings, in future, will only be made in the presence of a Custom's officer who can accurately check the actual movements out of the Province, as under the new regulations put in force by the Honourable the Minister of National Revenue, liquor can only be shipped from docks at which there is a Custom's officer in charge. In addition to this, the use of B-13 forms is to stop. Their abuse was amply shown in the cases tried in Windsor.

Hereafter, the movements of liquor for export from the Province must be made by a permit with the proper serial number issued by the Department itself. The Board understands that at an early date the new regulations will cover all export docks in the Province and that docks at other points will also be reduced. It is hoped that a substantial relief will be obtained through these reforms and that the short-circuiting, which has so undoubtedly taken place, substantially reduced. The changes effected by the Minister may be summarized as:—

1. The reduction of docks.
2. The elimination of the abuse of the B-13 forms.
3. The loading of liquor for export in the presence of a Custom's officer.

Suggested Amendments

From time to time, large seizures are made of liquor which is claimed to be held for export. The usual proceedings taken are to charge "illegally having" under the Act. Constables are unable to prove "keeping for sale" by actual evidence, and magistrates usually refuse to give effect to the presumption that the having of a large quantity of liquor under certain circumstances was for the purposes of sale. The liquor is, of course, confiscated and the holder fined under the Act. This is not at all a satisfactory solution. It does not enable the authorities to trace the liquor to its source, and the source of the supply is the matter of prime importance to be established in order to stamp out illegal practices. One illustration will suffice:—

A recent seizure was made on a farm in the Niagara district, some six miles away from the water. The police found in a hide, liquor which they estimated at a value of $3,000.00; none of it bore the Board's seals. The holder was charged with "illegally having" under Section 72 (2) of the Act. The penalty for the infringement of this section is provided by Section 103, which provides a minimum fine of not less than $100.00 and not more than $1,000.00. The fine

imposed was $250.00. Those engaged in the business always refuse to give any information to the police, from which the movement of the liquor could be properly traced to its source.

Bootlegging and short-circuiting will never really be stopped until proceedings are effectively taken against those supplying liquor in the first instance. The Board suggests an amendment to the penalty clause which would provide that in all cases where the liquor seized carries the Board's seals and exceeds $50.00, and in all cases where such liquor is without such seals that, in addition to the fine, a three months' sentence be imposed, unless the accused, to the satisfaction of the court establishes the manner in which the liquor was conveyed to the place where it was found, and by whom, as well as full particulars of the vendor or vendors and of the whole transaction.

Seizures, in the past, have been made of large quantities of liquor under the Ontario Temperance Act, which seizures were of necessity abandoned owing to proof of ownership by an American citizen and on the ground that the goods were in process of export. Under the local Acts, just as much under the Liquor Control Act as the Ontario Temperance Act, officers with search warrants could only seize and take intoxicating liquors. They could not seize and take books showing the course of business and papers indicating ownership. The only reason why the raids of last summer have succeeded where others failed, was that charges were laid under the Criminal Code which enabled search warrants to be issued under the Code, under which the police could seize and did seize not only the intoxicating liquors found, but also all books of account, documents and papers. The possession of these papers rendered impossible the effective defences of the past. It is submitted that the appropriate amendments should be made so that the seizures of papers, etc., can be made under the Liquor Control Act as fully and completely as under the Criminal Code itself.

Attention should also be called to the existing penalties for drunkenness. The penalty for the first offence is $100.00 and in default imprisonment for not more than thirty days. For the second offence, to a penalty of not less than $200.00 nor more than $500.00 and, in default, to imprisonment for not less than two months, nor more than four months. The greater majority of these cases are poor people, whose families can ill afford the loss of the fine or the loss of a month's support. Drunkenness is now regarded as an offence and it ought to continue to be so treated and convictions always secured, but the Board is of the view that some greater discretion might well be left the magistrates.

Law Enforcement

Enforcement of the Liquor Control Act being under your charge, the Board heartily appreciates the co-operation given to it by yourself and all members of the staff of the Commissioner of Police. Material aid has also been given by the Municipal Police throughout the Province, all of which has produced satisfactory results.

We have the honour to be, Sir,

Your obedient servants,

H. A. Drayton,
Chief Commissioner.

Stewart McClenaghan,
Commissioner.

J. M. McNamara,
Commissioner.

BALANCE SHEET

31st October, 1928

Assets

Land, buildings, furniture, equipment, fixtures and alterations to rented premises, less amount written off		$210,732 17
Cash on hand and in banks	$120,041 43	
Accounts receivable	84,335 85	
Inventories of liquor and supplies in warehouses and stores	3,502,880 33	
		3,707,257 61
Prepaid charges		29,811 48
		$3,947,801 26

Liabilities

Accounts Payable and Accrued Charges		$3,308,598 35	
Provincial Treasurer:			
Permit Sales—Balance from 1927	$13,390 33		
" " —1927-1928 (net)	881,472 04		
	$894,862 37		
Less: Paid to Provincial Treasurer	893,390 33		
	$1,472 04		
Permit sales—1928-1929	20,939 37		
Confiscated liquor	8,942 93		
		31,354 34	
			$3,339,952 69
Surplus 1st November, 1927		$4,760 25	
Balance from profit and loss account for the year ending 31st October, 1928		7,828,088 32	
		$7,832,848 57	
Less: Paid to Provincial Treasurer		7,225,000 00	
Surplus 31st October, 1928 (represented by goods purchased and other assets)			607,848 57
Contingent liabilities:			
Goods ordered but not delivered	$2,338,180 61		
Duty on goods in bond	1,896,844.63		
Contract for construction of warehouse at Fort William	81,000 00		
			$3,947,801 26

Auditors' Certificate

We certify that we have audited the books and accounts of the Liquor Control Board of Ontario for the year ending 31st October, 1928, and in our opinion the above balance sheet exhibits a true and correct view of the position of its affairs on that date.

CLARKSON, GORDON DILWORTH, GUILFOYLE & NASH,
Chartered Accountants.

Toronto, 18th December, 1928.

PROFIT AND LOSS ACCOUNT

For year ending 31st October, 1928

			Percentage of Sales 1928	1927
Sales (Schedule I)		$48,995,591 19	100.00	100.00
Stock on hand 1st November, 1927	$2,495,978 99			
Purchases	40,146,296 38			
	$42,642,275 37			
Stock on hand, 31st October, 1928	3,488,155 98			
Cost of stock sold		39,154,119 39	79.91	80.47
		$9,841,471 80	20.09	19.53
Miscellaneous earnings		27,548 32	.05	.02
		$9,869,020 12	20.14	19.55
Expenses:				
Administering and operating head office warehouses and stores (Schedule II)	$2,293,381 82			
Furniture, equipment, fixtures and alterations to rented premises, written off	555,693 91			
		$2,849,075 73	5.81	5.08
		$7,019,944 39	14.33	14.47
Other Revenue:				
Brewery warehouse fees	$360,950 00			
Brewery fees	166,500 00			
Light beer licenses, standard hotels, etc.	49,022 00			
Fines (net)	231,671 93			
		808,143 93	1.65	1.53
Carried to Balance Sheet		$7,828,088 32	15.98	16.00

SCHEDULE I

SUMMARY OF SALES

Year ending 31st October, 1928

Store—Counter and mail order sales of wines, spirits and beer..	$33,828,406 73	
Beer orders taken at stores for delivery by breweries and brewery warehouses	474,844 55	
Head office and warehouse sales	42,673 91	
		$34,345,925 19
Beer sales by breweries and brewery warehouses		14,649,666 00
		$48,995,591 19

SCHEDULE II

ADMINISTRATION AND OPERATING EXPENSES—HEAD OFFICE, WAREHOUSES AND STORES

Year Ending 31st October, 1928

And Number of Employees on the Staff at 31st October, 1928

	Head Office	Warehouses	Stores	Total	Percentage to Total Sales	
					1928	1927
Executive salaries	$53,999 52	.....	.....	$53,999 52	.11	.16
Salaries	452,306 58	81,239 74	875,496 67	1,409,042 99	2.88	2.57
Legal, audit and accountants' services	28,081 77	.....	.....	28,081 77	.06	.12
Rentals	25,200 00	16,200 22	145,940 33	187,340 55	.38	.34
Travelling	35,357 40	28 75	1,490 81	36,876 96	.08	.09
Foreign exchange	.....	6 19	7,730 07	7,736 26	.01	.....
Insurance	2,099 02	6,003 79	39,545 66	47,648 47	.10	.09
Postage	11,280 49	159 53	6,770 41	18,200 43	.04	.04
Stationery	24,397 08	4,432 01	20,250 14	49,079 23	.10	.25
Telephone and telegraph	4,809 93	428 28	6,771 85	12,010 06	.03	.05
Dominion Electric protection	.....	398 52	5,865 41	6,263 93	.01	.....
Breakage	.....	988 46	17,429 46	18,417 92	.04	.04
Light, heat and power	6,052 13	3,316 22	24,924 56	34,292 91	.07	.04
Repairs and maintenance	5,889 91	3,110 98	11,567 91	20,568 80	.04	.04
Sundries	18,786 77	1,924 73	14,026 71	34,738 21	.07	.18
Freight and cartage	1,017 45	10,135 76	185,520 33	196,673 54	.40	.42
Terminal Warehouse charges	.....	79,208 90	.....	79,208 90	.16	.12
Discounts to hospitals, etc	61 09	41 29	14,181 89	14,284 27	.03	.01
Truck maintenance	1,051 73	2,911 62	9,380 92	13,344 27	.03	.02
Packing materials	.....	1,555 93	24,016 90	25,572 83	.05	.11
	$670,390 87	$212,090 92	$1,410,900 03	$2,293,381 82	4.69	4.69
Percentage of total expenses	29.23%	9.25%	61.52%	100.00%		
Percentage of total sales—						
1928	1.37%	.44%	2.88%	4.69%		
1927	1.44%	.36%	2.89%	4.69%		

NUMBER OF EMPLOYEES ON THE STAFF

At 31st October, 1928

Commissioners' offices	10	
General Manager's Department	2	
Comptroller's Department	11	
Legal Department	2	
Accounting	79	
Central Registry	2	
Beer accounting	31	
Stock Supervising	12	
Customs	5	
Traffic	5	
Purchasing Department	11	
Permit Department	29	
Inspectors—Store	12	
Supervision of Stores Department	3	
Brewery Inspectors	164	
Department of Public Works	2	
General Inspectors	9	
Head Office maintenance	8	
		397
Stores		623
Warehouses		69
Garage		6
		1,095

SCHEDULE III

STORES, BREWERS' WAREHOUSES, BREWERIES AND WINERIES IN OPERATION

At 31st October, 1928

Stores

Store No.		
1	Lombard and Church Streets	Toronto
2	154 Wellington Street West	Toronto
3	1271 Dundas Street West	Toronto
4	170 Danforth Avenue	Toronto
5	1881 Queen Street East	Toronto
6	1271 Queen Street West	Toronto
7	2223 Dundas Street West	Toronto
8	1165 St. Clair Avenue West	Toronto
9	959 Bloor Street West	Toronto
10	617 Yonge Street	Toronto
11	949 Gerrard Street East	Toronto
12	402 Parliament Street	Toronto
13	1448 Danforth Avenue	Toronto
14	454 Spadina Avenue	Toronto
15	Dupont and Spadina Avenue	Toronto
16	106 Richmond Street West	Toronto
19	Rogers Road and Blackthorn Avenue	Toronto
20	67 Lake Shore Road	New Toronto
21	29 Charles Street	Hamilton
22	879 King Street East	Hamilton
23	334 Ottawa Street North	Hamilton
24	88 Fraser Street	Port Colborne
25	King and Sydenham Streets	Dundas
26	419 Talbot Street	London
27	647 Dundas Street	London
28	12 Canal Street	Dunnville
29	Burford Street	Wiarton
30	West Victoria Street	Walkerto
31	338 London Street	Windsor
32	52 Wyandotte Street East	Windsor

STOERS—Continued

Store No.		
33	93 Dronillard Road	Ford
34	82 Victoria Road	Walkerville
35	29 Sandwich Street	Sandwich
36	272 Queen Street	Ottawa
37	685 Bank Street	Ottawa
38	188 Rideau Street	Ottawa
39	King Street	Cobourg
40	Market Square	Kingston
41	109 Simpson Street	Fort William
41A	200 McVicar Street—Mail Order and Warehouse	Fort William
42	101 King Street West	Brockville
43	137 King Street East	Kitchener
44	69 Dalhousie Street	Brantford
45	408 George Street	Peterborough
46	Christina and Cromwell Streets	Sarnia
47	Ontario Street	St. Catharines
48	937 Victoria Avenue	Niagara Falls
49	66 Pitt Street	Cornwall
50	Cedar and Elgin Streets	Sudbury
51	72 Carden Street	Guelph
52	269 Main Street East	Welland
53	66 Cumberland Street South	Port Arthur
54	88 Main Street East	North Bay
55	185 Alexandria Street	Pembroke
56	Water Street	Prescott
57	52 Bridge Street East	Belleville
58	4 Balsam Street North	Timmins
59	72 Collier Street	Barrie
60	88 Ontario Street	Stratford
61	210 King Street West	Chatham
62	314 Talbot Street	St. Thomas
63	343 Queen Street East	Sault Ste. Marie
64	516 Dundas Street	Woodstock
65	Front Street	Trenton
66	6th Avenue North	Cochrane
67	Main and Ferguson Streets	Haileybury
68	214 Main Street South	Kenora
69	Church and Mowat Streets	Fort Frances
70	Bickwith Street	Smith's Falls
71	King and Main Streets	Gananoque
72	Gore and Herriot Streets	Perth
73	610 King Street	Preston
74	61 Robinson Street	Simcoe
75	Devonshire Avenue	Iroquois Falls
76	Prospect and Silver Street	Cobalt
77	121 Main Street	Penetang
78	Whitewood Avenue	New Liskeard
79	79 Walton Street	Port Hope
80	Great North Road	Parry Sound
81	Main and Queen Streets	Sturgeon Falls
82	79 Kent Street	Lindsay
83	31 Main Street West	Hawkesbury
84	Main Street	Picton
85	Daniel and Elgin Streets	Arnprior
86	Queen and White Streets	Dryden
87	Front Street	Sioux Lookout
88	River Street	Paris
89	Main and Mattawa-Pembroke Highways	Mattawa
90	68 Simcoe Street North	Oshawa
91	29 Duncan Street	Kirkland Lake
92	71 Fourth Avenue	Englehart
93	Gilmour Road	Fort Erie
94	Bridge Street North	Eganville
95	21 Water Street North	Galt
96	112 Main Street	Deseronto
97	Dundas Street	Napanee
98	22 Main Street	Alexandria
99	Emard Street	Embrun
100	23 Albert Street	Thorold
101	48 Main Street	Grimsby

STORES—Continued

Store No.		
102	Muskoka Street	Gravenhurst
103	Tudhope Street	Espanola
104	Main Street	Thessalon
105	Concession Street	Tamworth
106	Main Street	Huntsville
107	Main Street	Palmerston
108	Woodward Avenue	Blind River
109	Ramsay Street	Amherstburg
110	46 Wallace Street	Wallaceburg
111	Bedford Street	Westport
112	Government Road	Kapuskasing
113	Opongo Street	Barry's Bay
114	Corner Fourth Street and Broadway	Rainy River
115	43 King Street North	Waterloo
116	Arthur Street	Elmira
117	Birch Street	Chapleau
118	Young Street	Capreol

BREWERS' WAREHOUSES

Store No.		
1W	351 Front Street East	Toronto
2W	74 King Street East	Toronto
3W	581 Queen Street West	Toronto
4W	398 College Street	Toronto
5W	496 Bloor Street West	Toronto
6W	1485 Queen Street West	Toronto
7W	2233 Dundas Street West	Toronto
8W	1083 St. Clair Avenue	Toronto
9W	185 Danforth Avenue	Toronto
10W	1852 Danforth Avenue	Toronto
11W	Ferguson and Hunter Streets	Hamilton
12W	1092 Barton Street	Hamilton
13W	80 Bathurst Street	London
14W	665 Dundas Street	London
15W	413 Hamilton Road	London
16W	1153 McDougall Street	Windsor
17W	1630 Ottawa Street	Windsor
18W	1503 London Street West	Windsor
19W	109 Sparks Street	Ottawa
20W	842 Somerset Street	Ottawa
21W	294 Princess Street	Kingston
22W	580 Victoria Avenue	Niagara Falls
23W	78 Niagara Street	St. Catharines
24W	222 King Street East	Kitchener
25W	217 Talbot Street	St. Thomas
26W	Water and Lorne Streets	Port Arthur
27W	268 George Street	Peterborough
28W	23 Water Street	Brantford
29W	112 McDonnell Street	Guelph
30W	58 Brock Street	Brockville
31W	6 Dover Street	Chatham
32W	197 King Street	Chatham
33W	150 Pinnacle Street	Belleville
34W	1 Pitt Street	Cornwall
35W	University and Spring Streets	Cobourg
36W	George and Water Streets	Prescott
37W	22 Lorne Street	Sudbury
38W	143 Victoria Street North	Sarnia
39W	198 First Avenue West	North Bay
40W	Lindsay and King Streets	Lindsay
41W	Second Avenue	Cochrane
42W	Bay and Brock Streets	Sault Ste. Marie
43W	Beckwith Street	Smith's Falls
44W	Ridgeway Street	Trenton
45W	Burger and Victoria Streets	Welland
46W	492 Peel Street	Woodstock
47W	423 Erie Street	Stratford
48W	Killally Street	Port Colborne
49W	1 Second Avenue	Timmins

Brewers' Warehouses—Continued

Store No.		
50W	Argyle Street	Simcoe
51W	269 Mill Street	Port Hope
52W	19 Main Street	Penetang
53W	182 Prince Street	Pembroke
54W	767 King Street	Preston
55W	27 Cockburn Street	Perth
56W	Railway Street	Kenora
57W	101 Church Street	Fort Frances
58W	King Street	Gananoque
59W	Gilmour Road	Fort Erie
60W	Post Office Square	Barrie
61W	180 Drouillard Road	Ford
62W	Main Street	Huntsville
63W	Ferguson Avenue	Haileybury
64W	Main Street	Hawkesbury
65W	William Street	Arnprior
66W	185 Lake Shore Road	Mimico
67W	Main Street	Picton
68W	Dalhousie Street	Amherstburg
69W	North Cayuga Street	Dunnville
70W	Main Street	Belle River
71W	Main Street	Glencoe
72W	Champagne Street	Parry Sound
73W	Main Street	Ridgetown
74W	Queen Street South	Tilbury
75W	56 Lesperance Road	Tecumseh
76W	897 Queen Street East	Toronto
77W	King Street West	Dundas
78W	497 James Street North	Hamilton
79W	426 Bank Street	Ottawa
80W	223 Dalhousie Street	Ottawa
81W	161 King Street West	Oshawa
82W	14 St. Paul Street	St. Catharines
83W	9 Market Street	Thorold
84W	Colborne Street	Oakville
85W	Front Street	Sioux Lookout
86W	Burford Street	Wiarton
87W	35 Goodfish Road	Kirkland Lake
88W	Durham Street	Walkerton
89W	39 Dickson Street	Galt
90W	Muskoka Road and Main Street	Gravenhurst
91W	Mill Street	Napanee
92W	Main Street	Alexandria
93W	Nelson Street	Wallaceburg
94W	1395 Gerrard Street East	Toronto
95W	Goderich Street	Port Elgin
96W	2 Marlborough Street South	E. Cornwall
97W	1 Main Street	Morrisburg
98W	2420 Dufferin Street	Fairbank
99W	1145 Yonge Street	Toronto
100W	Main Street	Palmerston
101W	Regent and King Streets	Niagara-on-the-Lake
102W	3333 Danforth Avenue	Toronto

Breweries

O'Keefe Beverages, Limited	Toronto
Cosgrave Export Brewing Company	Toronto
Dominion Brewery Company, Limited	Toronto
Canada Bud Breweries, Limited	Toronto
Grant Spring Brewery, Limited	Hamilton
Hamilton Brewing Association, Limited	Hamilton
John Labatt, Limited	London
Carling Export Brewing Company	London
British American Brewing Company	Windsor
Capital Brewing Company, Limited	Ottawa
Brading Breweries, Limited	Ottawa
Lake Ontario Brewing Company, Limited	Kingston
Taylor & Bate, Limited	St. Catharines

BREWERIES—Continued

Huether Brewing Company, Limited	Kitchener
Kakabeka Falls Brewery, Limited	Fort William
Port Arthur Beverages, Limited	Port Arthur
Bixel Brewing & Malting Company, Limited	Brantford
Quinte Breweries, Limited	Belleville
Sudbury Brewing & Malting Company, Limited	Sudbury
Sarnia Brewing Company, Limited	Sarnia
Soo Falls Brewing Company, Limited	Sault Ste. Marie
Cronmiller & White Brewing Company	Welland
Perth Brewery, Limited (Devlin, Felix & Thomas)	Stratford
Kuntz Brewery, Limited	Waterloo
Walkerville Brewery, Limited	Walkerville
Kenora Brewery, Limited	Kenora
Fort Frances Brewing Company, Limited	Fort Frances
Riverside Brewery Company, Limited	Riverside
Formosa Spring Brewery, Limited	Formosa
Sleeman's Spring Bank Brewery	Guelph
Chas. Schwan Brewery	Carlsruhe
Reinhardt Brewery Company, Limited	Toronto
Holliday Brewery, Limited	Guelph
Rock Brewery	Preston
Tecumseh Brewing Company, Limited	Tecumseh
Copland Brewing Company, Limited	Toronto
Hofer Brewing Company, Limited	La Salle

BREWERIES LOCATED OUTSIDE THE PROVINCE OF ONTARIO WHOSE PRODUCTS ARE SOLD THROUGH ONTARIO BREWERS' WAREHOUSES

Kiewel Brewing Company, Limited	St. Boniface, Man.
Molson's Brewery, Limited	Montreal, Que.
Frontenac Breweries, Limited	Montreal, Que.
Ontario National Beverages	Montreal, Que.
(Dow Brewery—Montreal)	
(Dawes Brewery—Montreal)	

WINERIES

Badalato, S.	R.R. 9	London
Bayliss, F. W.	427 Spadina Ave	Toronto
Belluz, Pietro	514 McTavish Street	Fort William
Bradley, E. C.	R.R. 1	Fonthill
Bright, T. G., & Company, Limited		Niagara Falls
Canada Vine Growers, Ltd		Cooksville
Canada Wine Products, Limited	83 King Street West	Toronto
Canadian Wine Company	889 Queen Street West	Toronto
Castrucci, O. A.	187 Parliament Street	Toronto
Ciurluini, A.	R.R. 4	St. Catharines
Concord Wine Company, Limited	181-185 Bathurst Street	Toronto
Danforth Wine Company	355 Danforth Avenue	Toronto
Davie Brothers	176 Minto Street	Sudbury
DeConza, Antonio	51½ North Street	St. Catharines
DePietro, D.	R.R. 1	Beamsville
Dibbley, Mrs. R. E.	1 Tournier Street	Sandwich
Dominion Wine Growers	Dundas Street	Oakville
Donovan, Mrs. E. H.	31 John Street	Hamilton
Fort William Wine Company	114 McVicar Street	Fort William
Furminger, F. L.	R.R. 2	St. Catharines
Gordon, Rabbi Jacob	116 Beverley Street	Toronto
Hagaman, H. C.	Dundas Street	Oakville
Hamilton, J. S., & Company, Limited	44 Dalhousie Street	Brantford
Huehnergard, B.	R.R. 3	Kitchener
Jordan Wine Company		Jordan
Kampman, Fred	217 Breithaupt Street	Kitchener
Lincoln Wines, Limited		St. Catharines
London Winery	R.R. 1	London
Luelo, Carl	160 Queen Street South	Kitchener
Meconi, Mariano	421 Wyandotte Street E.	Windsor
National Fruit & Wine Company	31 Brock Avenue	Toronto
Ontario Grape Growing Company		St. Catharines
Ontario Wine Company	Stop 22, Lake Shore Road	New Toronto
Parkdale Wines, Limited	1363 Queen Street West	Toronto

WINERIES—Continued

Peerless Wine, Limited	448 Queen Street East	Toronto
Pensa, Phillip	24 Yonge Street	Kitchener
Porpiglia, Joseph	R.R. 2	St. Catharines
Rizzo, Nicholas & Sons	137 York Street	Hamilton
Robinet, Clovis	100 Baby Street	Sandwich
Robinet, Frank	177 Sandwich Street	Windsor
Robinet, Jules	171½ Sandwich Street E.	Sandwich
Robinet, Victor	141 Sandwich Street E.	Tecumseh
Rossoni, Carlo	1218 Tecumseh Road E.	Windsor
Stamford Park Wine Company	R.R. 3	Niagara Falls
Subosits, Victor	Box 64	Welland
Tadeussow, Thomas		Niagara Falls
Thomas, Alexander	Dundas Street	Cooksville
Thorold Winery Company, Limited	Ormand Street	Thorold
Toronto Wine Manufacturing Company	1682 Queen Street West	Toronto
Turner Wine Company	106 Front Street East	Toronto
Windsor Company, Limited	Walker Road and Edna Street	Walkerville

DISTILLERS

Hiram Walker & Sons, Limited	Walkerville, Ont.
Gooderham & Worts, Limited	Toronto, Ont.
Consolidated Distilleries, Ltd.	Head Office—Montreal, Que. Distillery at Corbyville, Ont.
Lindsay Distilleries, Ltd.	Lindsay, Ont.
Highland Scotch Distillers, Ltd.	Port Colborne, Ont.
Joseph E. Seagram & Sons	Waterloo, Ont.
Wiser's Distillery, Ltd.	Prescott, Ont.

SCHEDULE IV

STATEMENT SHOWING THE NUMBER OF PERMITS AND LICENSES ISSUED DURING THE TWELVE MONTHS' PERIOD ENDING 31st OCTOBER, 1928

PERMITS

November 1st, 1927, to October 31st, 1928:		
Resident	376,839	
Temporary	88,135	
Duplicate	26,064	
Physicians	645	
Druggists	458	
Dentists and Veterinary Surgeons	173	
Manufacturers	290	
Mechanical and Scientific	79	
Minister of the Gospel	203	
Hospitals	257	
		493,143

LICENSES

Brewers' Licenses	44	
Brewers' Warehouses	1,265	
		1,309
Native Wine permits	51	
Sacramental Wine Vendorships	3	
Non-potable Alcohol	6	
Standard Hotel	287	
		347
		1,656

Ontario Department of Agriculture

REPORT

OF THE

Minister of Agriculture

Province of Ontario

FOR THE YEAR ENDING OCTOBER 31, 1928

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO

SESSIONAL PAPER No. 21, 1929

ONTARIO

TORONTO
Printed by the Printer to the King's Most Excellent Majesty
1929

PRODUCED BY
The United Press
LIMITED
TORONTO
CANADA

REPORT

OF THE

Minister of Agriculture for Ontario

1928

To His Honour W. D. Ross,

Lieutenant-Governor of the Province of Ontario.

May it Please Your Honour:

I have the honour to submit the Annual Report of this Department for the fiscal year ending October 31st, 1928.

A glance at the comparative figures of values herein given, will show that the past season was not quite up to the previous season:

	1927	1928
Field crops	$255,900,000	$243,768,000
Farm animals	72,896,000	75,908,000
Wool	1,112,000	1,502,000
Dairy products	102,045,000	102,000,000
Fruits and vegetables	18,344,000	19,658,000
Poultry and eggs	41,296,000	45,993,000
Fur farming	566,000	600,000
Maple products	1,772,000	1,888,000
Tobacco	7,556,000	5,823,000
Flax fibre	321,000	509,000
Clover and grass seed	2,798,000	2,212,000
Honey	890,000	960,000
	$505,496,000	$500,821,000

The variations were even greater than the figures indicate. Certain sections of the province, particularly in eastern Ontario and in northern Ontario suffered very severely on account of excessive and repeated rains and there were many cases of individual hardship. On the other hand, other sections had good crops and excellent returns. It was, for instance, a splendid year for the dairy industry, both from the standpoint of volume of output and quality of product.

The activities of the department have been carried on with marked evidences of success. It is most encouraging to find an increasing demand from farmers, in all sections of the Province, for information on the various problems which come up. It is also particularly encouraging to note the special interest which is being displayed by the boys on the farms in the opportunities for self-improvement which are offered from time to time. A more detailed review of these activities will be found in the accompanying pages, under the different Branches of the Department.

All of which is respectfully submitted,

John S. Martin,

Minister of Agriculture.

ONTARIO AGRICULTURAL COLLEGE

Following are the figures showing the attendance in the different departments of the College, the total indicating an increase over the previous year:

General Course	335	
Specialists in General Course Work	7	
Farm Drainage	11	
Dairy Courses	114	
Live Stock and Field Crops	282	
Poultry Raising	33	
Horticulture	34	
Apiculture	13	
Better Seed Course	23	
Farm Power	33	
Spray Supervisors' Course	53	
Baking School	30	
		968
Home Economics Short Course		8
Domestic Science (at Macdonald Institute)		446
Girls' Conference (Junior Women's Institute)		233
Summer Courses:		
High School Teachers—1st year, 51; 2nd year, 54	105	
Public School Teachers—1st year, 52; 2nd year, 69	121	
		226
Total		1,881

Change in Presidency

A change in the presidency is an important event in the life of an institution of this character. During the year Dr. J. B. Reynolds retired and was succeeded by Dr. George I. Christie. Dr. Reynolds occupied the presidency for some eight years. He was, however, for some twenty-two years attached to the staff of the College in other capacities, mainly as Professor of English. Thus, with the exception of a few years as president of the Manitoba Agricultural College, his life work has been devoted to this institution and he retires to the position of president emeritus, with the respect of those among whom he has laboured faithfully. Dr. Christie, who succeeds, is a graduate of the institution who has spent upwards of twenty-five years across the line, mainly at Purdue University, where he was Director of the Experimental Station and extension work. He has had a particularly outstanding and brilliant career and comes back to his alma mater at a time of life when he should be able to render many years of excellent service.

ANIMAL HUSBANDRY DEPARTMENT

Following is a summary of some of the investigational work in live stock, which has been done during the year.

1. An investigation into the blood lines of the winning Clydesdales at the three largest shows in Canada during the past ten years. This study revealed that over ninety per cent. of the Clydesdales winning in our shows traced to Baron's Pride, and over seventy per cent. of these were through Baron of Buchlyvie, the outstanding son of Baron's Pride.

2. A study of the blood lines of the Shorthorn bulls that qualified in the Record of Performance and some of the outstanding Record of Performance cows. The result of this work showed that Scotch bred animals have played a larger part in the blood lines of milking Shorthorns in this country than have animals imported from England.

3. A study of the blood lines of the show-ring winners of Canadian Aberdeen Angus cattle for the past twenty years. The result of this work showed that Prince of Benton, Iliad, Advocate of Hillhurst, Black Woodlawn, Lord Val 2nd, Kyma's Heir and Prince Ito were the outstanding sires of this breed, a great many of them being of American breeding.

4. A study of the relationship of the show-ring animals and milk production of the Ayrshire breed in Canada. The result of this study shows that a great many of the leading show bulls of the Ayrshire breed in Canada are the leading sires of qualified daughters and that there is probably a little closer relationship between the show-ring winners and the best producers in this breed than in any other breed in Canada.

5. An extensive study of the Record of Performance for dairy cattle was made.

In order to test the efficiency of a dry meal mixture for raising dairy calves the following experiment was run with dairy calves after they were two months old.

Lot 1 fed on the regular feeding which included roots, clover hay, meal and skim milk cost 14 cents per day but gained 1.9 pounds per head per day for a period of three months.

Lot 2 fed roots, clover hay, meal and commercial calf meal which had water added cost 11 cents per day and gained 1.5 pounds per head per day for the same period.

Lot 3 fed roots, clover hay, and a meal mixture of 100 pounds oats, 100 pounds bran, 75 pounds oilcake and 8 pounds of bone meal, cost 7.5 cents per day and gained 1.15 pounds per day for the three months' period.

NOTE.—The meal fed to Lots No. 1 and 2 was composed of 100 lbs. oats, 100 lbs. bran and 20 lbs. oilcake.

In the Swine Department an investigation is being made to discover, if possible, the cause of the heavy mortality common to young pigs which are farrowed during winter months. While considerable work has been done on this subject during the past two years, definite conclusions have not yet been reached and the work will be continued.

APICULTURE DEPARTMENT

In addition to teaching and research, the Apiculture Department supervises the inspection of apiaries throughout the Province. Altogether 115 apiary inspectors were engaged for varying periods during the active season. There were 2,872 apiaries inspected and 45,953 colonies examined. A total of 3,460 colonies were found to have American Foulbrood and were consequently destroyed. Progress now seems to be achieved in reducing the damage done by American Foulbrood. The work is receiving greater support from the men in the industry than ever before.

In the experimental work in the department, study was made of the spread of American Foulbrood through honey. It was found that honey in combs from colonies infected with American Foulbrood would infest any colonies of bees to which it might be fed. This experiment was conducted to prove to beekeepers the danger of feeding back honey to colonies unless positive the honey came from colonies free from American Foulbrood.

BACTERIOLOGY DEPARTMENT

The Bacteriology Department has been able, during the year, to render considerable service to the Province in addition to the teaching and investigational work carried on at the College. The dairy industry has called for considerable assistance from the bacteriologists. A total of 1,049 samples of butter from various creameries was forwarded from the Butter Grading Station at Toronto for the determination of yeast and mould content. This test serves as a check on the cleanliness and the general efficiency of the creamery in which the butter was made. Comparing the results obtained during the past season, with those obtained previous years, it would appear that a steady improvement was being made in the hygienic conditions under which butter is manufactured in this province. Thirty-seven samples of lactic starters used in cheese factories in western Ontario were sent in for examination, and 120 samples of water from the creameries and cheese factories were also examined.

Bacteria for the inoculation of legumes was, as usual, prepared and sent out, 3,557 being used by the farmers during the season.

Samples of farm well water were examined to the extent of 110, and of these, 81 were found to be contaminated. This would indicate that this important matter is worthy of even more attention on the farms of the Province.

CHEMISTRY DEPARTMENT

Soil work has continued to be prominent in the outside activities of the Department of Chemistry. The soil survey of Norfolk County has been completed, and the information secured has resulted in the remarkable development in the tobacco industry in this section of the province. In addition, other areas have been found to be well adapted for the growing of canning crops. Along with the survey of soils a good deal of attention is naturally being given to the treatment of soils. Soil acidity surveys have been made in several districts where farmers believed agricultural lime to be needed, and in some cases these tests proved clearly that lime was not required, where it had been intended to apply it. Thus the farmers were prevented from expending money on something which would not have proved beneficial, and are, therefore, in a better position to purchase what really would build up their soils. In other sections, demonstration plots have been conducted to show the value and influence of fertilizers. There is an increasing demand for work of this nature.

DAIRY DEPARTMENT

Experiments carried out in the Dairy Department brought out some interesting facts.

The Cheddar Cheese investigations show:—

(a) That viscolizing milk, at pressure of 1,000 to 2,000 pounds before adding the rennet reduced the loss of fat in the whey, and increased the yield of cheese by 2.27 pounds per 1,000 pounds milk, chiefly by increasing the moisture content of the cheese, but the score of the cheese from the viscolized lots was not so high as in the case of the unviscolized lots, the chief differences being in flavour and texture, which were adversely affected by viscolizing.

(b) A good culture ("starter") increased the yield of cheese by 4.9 pounds per 1,000 pounds milk, and improved the score of the cheese, as compared with using an "off-flavoured" culture. Cheesemakers are advised to give special attention to the quality of their cultures and not to use one which is not good.

(c) Milk which was graded "Good" produced more cheese and cheese of better quality (graded No. 1) as compared with cheese made from milk which was graded "Poor" or "Bad" at the time it was received. The time will come when it will be necessary to grade all milk for cheesemaking and pay a higher price to the producer of "good" milk, in order to maintain a high standard of quality in Canadian cheese.

The addition of "Cheese Mineral" to milk and cream for the manufacture of cheese and butter did not improve the quality of either the cheese or the butter.

Butter investigations gave the following results:

(a) The quality of butter made from sweet or unripened cream was better, both when fresh and after holding in cold storage for six months, as compared with butter made from similar cream ripened with pure cultures. Similar results were got in favour of churning "neutralized" cream without ripening, as compared with lots "neutralized" and afterwards ripened with a lactic acid culture.

(b) The addition of ten per cent. lactic culture to sweet cream immediately before churning did not improve the flavour of the butter when fresh, nor after holding it in cold storage for six months.

(c) The fat lost in the buttermilk can be separated quite readily by using a cream separator if the cream be not allowed to sour, but when the cream is allowed to sour the fine particles of curdy material clog the separator bowl in a short time, making it impossible to separate the fat until the bowl is cleaned.

By using a special U.S. culture, skim milk can be made into a semi-solid product similar to that obtained from buttermilk. The ordinary lactic acid culture does not produce sufficient acidity in skim milk to preserve it, and give a smooth product free from lumps and water.

A comparative test of pasteurized viscolized milk with unviscolized pasteurized milk, among customers of the Market Milk Branch in the Dairy Department, showed that sixty-two per cent. favoured the viscolized and thirty-eight per cent. the unviscolized milk.

FIELD HUSBANDRY DEPARTMENT

More than thirty per cent. of the grain crops now grown in Ontario came from seed of varieties originated, tested and distributed through the Field Husbandry Department, where similar extension work was again carried on last year. It may be of interest to review a few of these varieties.

O.A.C. No. 104 Winter Wheat is being grown widely throughout the Province. It was produced by crossing Dawson's Golden Chaff and Bulgarian varieties and it is now a close rival of Dawson's Golden Chaff. It has attracted attention outside of the Province, and has been subject to close study by the Michigan Agricultural Experiment Station across the line. This station reports that it found O.A.C. No. 104 produces more grain to the acre, is slightly higher in protein content, and is more winter hardy than American Banner, a white wheat, commonly grown in that state.

O.A.C. No. 144 oats, introduced only five years ago, is already taking a prominent place in the field crop competitions in oats throughout the Province.

O.A.C. No. 181 field peas, a cross between the Prussian Blue and White Wonder, are now in great demand. Last season the supply of seed of this variety was not sufficient to meet the demand.

O.A.C. No. 21 barley continues to hold its outstanding position in the Province and has recently been reported on, after a series of tests, as being the best existing six-rowed barley for malting purposes, available in this country.

AGRICULTURAL ENGINEERING DEPARTMENT

Drainage

With the excessive rains in many parts of the Province, there has been an increased attention to the importance of proper drainage. Assistance with these problems has, as usual, been rendered in many ways. In the first place field surveys have been made and a plan provided showing where tile should be placed. The following summary will show the extent of this work.

County	Number of Surveys	Acres	Feet
Western Ontario			
Elgin	23	.....	45,100
Essex	19	871	.....
Kent	42	1,452	41,095
Lambton	20	405	41,275
Middlesex	12	11	23,600
Eastern Ontario			
Carleton	7	290	143,500
Frontenac	2	21	.....
Glengarry	2	115	30,400
Grenville	4	85	16,000
Hastings	1	.....	2,300
Lanark	1	30	4,000
Leeds	4	165	26,000
Lennox	5	.....	20,500
Renfrew	8	525	85,000
Southern Ontario			
Brant	2	10	1,200
Halton	12	215	25,300
Lincoln	16	223	13,900
Norfolk	5	10	13,600
Peel	5	50	7,000
Welland	2	.....	5,000
Wentworth	9	210	13,300
York	8	547	4,000
Central Ontario			
Bruce	3	50	.....
Grey	2	25	4,700
Huron	3	175	.....
Ontario	5	260	20,000
Oxford	2	.....	6,400
Perth	10	155	11,585
Simcoe	14	.....	11,800
Victoria	2	.....	4,800
Waterloo	12	250	3,400
Wellington	5	235	3,700

In addition, advice has been given in many cases where actual plans were not required. Furthermore a special effort has been made to see that the work of laying tile is done efficiently. The cost of this work is too great to take chances. Wherever possible men on the drainage staff have endeavoured to inspect the work as done by those who have been laying the tile. In many cases errors were checked up and serious disappointments prevented. While the department, of course is not in a position to give any guarantees in regard to the installation, which is a business matter between the farmer and the operator, the men are

glad to render assistance by way of inspection wherever possible. Furthermore educational work has been carried on among ditching machine operators to bring about a higher standard of efficiency. There are over 200 ditching machines working in the Province at the present time. Demonstration plots have been carried on at a number of points.

POULTRY DEPARTMENT

There has been a steady development in the work with poultry and in the demands being made by poultry raisers throughout the Province.

One of the outstanding features of the work of the past year has been the research work carried on in co-operation with the Empire Marketing Board. Several thousand eggs were set during the year and the results recorded. This work, of course, is being continued over a period of years and definite conclusions should not be drawn too soon. So far, however, results indicate possibilities of making very effective improvements in diet, by the use of cod liver oil. These results suggest that cod liver oil included in the diet will, in a large measure, offset the lack of sunshine in the month of March and will bring the percentage of hatchability in eggs up to that shown in months in which there is plenty of sunshine. There are many scientific problems involved in this work and its continuation will be watched with interest.

The turkey farm in Norfolk County has been operated under this department and is now in its third year. Excellent results were obtained and upwards of 1,200 turkeys were raised, without any serious loss through disease. This splendid result is attributed to the sanitation methods which are followed. Care is exercised to see that the feed is always supplied in a clean trough and never placed on the ground. Where troughs are moved daily and kept clean, there has been little or no disease, but where the feed has been placed on the ground, particularly near buildings, disease quickly develops.

In addition to the culling work which has been looked after in the past, the department has undertaken a more scientific inspection of poultry farms coming up to a certain standard. Altogether about 60,000 birds have been entered for this inspection, which is to be started this fall.

One of the experiments carried on during the year was a test made, at the request of a man from across the line, who claimed that by the application of X-ray to eggs, the sex of the chickens hatched could be controlled and growth greatly hastened. Several hundred eggs were treated as advised, but the results so far have been negative. It is possible that more work will be done on this matter of the application of X-Ray to eggs for hatching purposes.

ONTARIO VETERINARY COLLEGE

In the matter of attendance at this institution there has been a slight increase. For the session ending April 30th a total of seventy-six students were in attendance, including twenty-two in the first year class, sixteen in the second, eighteen in the third, and twenty in the fourth. Of the latter number, eighteen were successful in passing their final examinations and received the Degree of Bachelor of Veterinary Science (B.V.Sc.) from the University of Toronto. For the present term there are eighty students registered.

Graduates have made an excellent showing in being able to pass successfully civil service examinations for veterinarians both in Canada and the United States. That there are many excellent openings for graduate veterinarians is indicated by the fact that all recent graduates have become satisfactorily settled either in private practice or in official positions, in which there is an opportunity to render excellent service in safeguarding the animal health of the country.

Research Work

In addition to carrying on the work of instruction, a good deal of research work is also done at the Veterinary College. Two features of this may be mentioned. The making of blood tests in poultry and cattle and sending out abortion and other vaccines have been started on very extensively as a result of the general and popular demand for this work. If this service had been made available on the prevailing commercial terms, the amount of work done would have brought to the College a revenue of over $100,000. This gives some idea of the extent and value of the service which has been quietly but effectively rendered to the live stock interests of the Province by this branch of the Veterinary College work. As a matter of fact a great deal of time is given to this phase of college activity and there is every indication that this work will develop in accordance with the popular demand and the opportunity for rendering excellent service. A real assistance is also rendered through correspondence.

Much of the work carried on during the past year is outlined in a separate report of the College, which contains a good deal of valuable information. The subjects dealt with are as follows:

Cattle Diseases.
Diseases of Sheep.
Diseases of Pigs.
Small Animal Diseases.
Liver Disease in Horses.
The Disinfection of Incubators during Hatching.
Subacute Infections in Fowl.
Vermicidal Action of Iodine and Kamala,
and other related subjects.

PUBLICATIONS AND STATISTICS BRANCH

The work of compiling agricultural statistics was carried on in co-operation with the federal authorities. The results are published from time to time as completed.

The distribution of the annual reports has been continued and the following are the figures of the numbers printed for distribution:—

Minister's Report	3,000
The Ontario Agricultural College	2,500
The Experimental Union	50,000
Agricultural Societies and Field Crop Competitions	14,000
Horticultural Societies	20,000
Vegetable Growers' Association	5,000
Ontario Veterinary College	4,000
Agricultural Development Branch	3,000
Stallion Enrolment Board	3,500
Agricultural Statistics	15,000
Fruit Growers' Association	4,000
Entomological Society	3,000
Beekeepers' Association	4,000
Women's Institute	40,000
Ontario Commodities on the British Market	5,000
Total	176,000

The following crop bulletins have been printed for distribution:—

173 December, 1927	32,000
174 April, 1928	3,000
175 May, 1928	3,000
176 August, 1928	4,000

Other bulletins printed for distribution were:—

*188 Weeds of Ontario	12,000
*305 Poultry Diseases	12,000
*312 Vegetables: Their food value and preparation	40,000
332 Forty Years' Experiments with Grain Crops	50,000
333 Tobacco Culture	12,000
334 European Corn Borer	50,000
335 The Strawberry	15,000
336 Cheese and Butter Making	15,000
337 Parasites Injurious to Sheep	20,000
338 Hints on Judging Live Stock, Poultry, Grains, Grasses and Roots	30,000
339 Potatoes	30,000
340 Parasites Injurious to Swine	30,000
Total	316,000

Circulars were printed for special distribution as follows:—

50 Eradicate the Common Barberry	15,000

Circulars without serial number:—

Weed Act and Regulations	15,000
Tobacco Soils in Norfolk County	5,000
Hemorrhagic Septicaemia of Cattle	5,000
Dead Arm of the Grape	4,000

*New edition.

AGRICULTURAL AND HORTICULTURAL SOCIETIES BRANCH

The majority of the agricultural societies in Ontario are showing steady progress, not only in the number of exhibits at their fairs, but also in the quality of the live stock and farm products entered for competition. Judges of horses report that the animals in different classes were better, both in type and condition, than had been in evidence before the Great War. There has been a decided improvement in the preparation of prize lists of fairs, which has been the means of attracting many exhibitors who had been indifferent in the past. The difficulty experienced in former years because amateurs would not show their handy work in the main buildings in competition with professional exhibitors has been solved by societies setting apart special classes for amateurs only.

One of the most serious drawbacks that a fair has to contend with is bad weather conditions. The arrangements of directors for a successful fair may be the very best possible and yet these may be all destroyed by heavy rain storms, and, what makes things worse, is the fact that a large quantity of the exhibits may have arrived before the rain had fallen and the prize money has to be paid, although the gate receipts are very much less than they ordinarily are. The losses in gate receipts through wet weather are, as a rule, considerably larger than the legislative appropriation set apart to assist agricultural societies which meet with such losses. In 1928 the loss in gate receipts owing to bad weather conditions was over $13,000, being $3,000 more than the appropriation for this purpose. The provision in this regard made by the government has saved many societies from heavy deficits and is greatly appreciated by the boards of directors of fairs and exhibitions.

The work of the several hundred judges sent out by the Department has been satisfactory and very few complaints have been received regarding the efficiency of their work. This applies to judges of field crop competitions as well as those who placed the awards at fairs and exhibitions. The holding of short courses for judges at the Ontario Agricultural College, Guelph, and the Central Experimental Farm, Ottawa, has been of untold benefit in bringing about a more uniform standard of judging both live stock and field crops.

FIELD CROP COMPETITIONS

These competitions, both regular and combined, continue to meet with the approval of agriculturists all over the Province. Over 4,000 Ontario farmers entered the competitions and in some societies there were as many as thirty competitors, and the quantity and quality of the grain produced by these enterprising farmers have never reached a higher degree of excellence, and the quantity of registered seed grain has been largely increased and harvested.

In Northern Ontario crops were badly damaged owing to the extremely bad weather conditions which prevailed over so continuous a period.

The grain exhibited at the Canadian National Exhibition and the Royal Winter Fair was considered by those in a position to judge as the finest ever staged at what can be truly described as two outstanding world fairs.

These field crop competitions were inaugurated in 1907 and have shown continuous progress and the year just closed has broken the record in point of entries and exhibits. Those in charge of these competitions have from time to time reduced the number of varieties best suited to Ontario farmers. In oats alone in 1907 there were over 100 named varieties while to-day there has been a standard fixed with a list of eight varieties and standards have also been set for other varieties of grain.

HORTICULTURAL SOCIETIES

Few branches of the Department of Agriculture have shown such marvellous progress as have the horticultural societies of Ontario. No country in the world has such a large and progressive organization for the beautification of urban and rural sections, such as we have in this banner province.

Specially marked for notice and comment is the fact that farmers are catching the spirit of beautification of home and farm surroundings by the encouragement given in the planting of trees, vines, shrubs and flowers around formerly somewhat naked environments. The time is not far distant when every community in this province will be engaged in this laudable work, which creates such favourable comment on the part not only of our own citizens, but also of tourists from other countries who cross our boundary line in their thousands, particularly during the summer season and find in Canada excellent roads and cities, towns and villages with well-kept lawns and gardens, and express surprise at the beauty and prosperity in this specially favoured section of our Dominion.

Over 78,000 members have been enrolled in this progressive organization and it is expected that in the near future the 100,000 mark will be reached.

A number of horticultural societies are doing good work among children, having organized them into junior branches. The child who commences to take an interest in flowers and vegetables in early life will never lose its love for them, and in due time will become a full-fledged and enthusiastic member of the parent society.

The great quantity of rain that fell over many parts of the province during 1928, while it had its disadvantages so far as grain and vegetables were concerned, yet had the effect of keeping lawns verdant and flowers blooming on every hand.

The number of new societies organized in 1928 was twenty-four, seven more than in the year previous, nearly half of these being rural ones.

Numerous requests for lectures have been received from the societies, and these have been met by speakers from the Department and from qualified horticulturists in different sections. These lectures are greatly appreciated, and the subjects are selected to meet the requests of the societies applying.

ONTARIO VEGETABLE GROWERS' ASSOCIATION

It is a quarter of a century since the Ontario Vegetable Growers' Association was organized, and during those years substantial progress has been made by those intensive tillers of the soil, who grow as fine garden products as are produced anywhere on this continent. For the last two years the Canadian National Exhibition has given large and outstanding prizes for the best exhibits put up by the different branches, and never before in the history of the Canadian National Exhibition has there been such a fine display by market gardeners. It is doubtful if any exhibit of garden produce ever created greater interest than the one in 1928. An officer of the Department was in charge and was continuously required to answer questions by American citizens and others what part of Canada these products were grown in.

A number of markets have been established by our growers in urban centres and these are much appreciated by consumers wherever they are located, and have proved a financial success.

Much disappointment was expressed, wherever a branch of the Ontario Vegetable Growers' Association is established, at the action of the Federal

government in making the dumping clause inoperative. Several delegates visited the Tariff Board, not only from Ontario but also from the other provinces, urging that relief be given in this regard, but nothing has yet been done to right what vegetable growers consider a serious injustice.

The board of directors have offered a permanent $100 trophy to be competed for annually by the members of the association in the Province at the Royal Winter Fair, and a replica is given each year to the winner. This trophy has created keen competition throughout the Province and was won by John Brown, Humber Bay, in 1928.

A larger number of meetings were held by the branches than ever before, and a new departure was inaugurated by the members of one branch visiting those of another, and the interchanging of ideas and methods of culture has proved invaluable to all concerned.

A bulletin is issued each month to the branches from the head office at the Parliament Buildings, which is much appreciated by the members.

Many of our gardeners are utilizing their greenhouses for growing flowers during the winter season. This new line of work has proved satisfactory.

ONTARIO FIELD CROP AND SEED GROWERS' ASSOCIATION

For the third year in succession the Department of Agriculture, with the consent and assistance of the railways concerned, has sent out a seed-cleaning demonstration train to sections of the Province. The demonstration in 1928 commenced at Alvinston on February 16th, and traversed a portion of Ontario through which the train had not been previously. At every stoppage the cars were visited by thousands of interested farmers, who examined the seed-cleaning machinery carefully with a view to purchasing, and saw them in operation and attended the lectures on the best varieties of grain and seed and on methods of weed eradication, which were particularly timely in view of the campaign now under way against noxious weeds. A limited quantity of grain was brought to the train and carefully cleaned and graded. The demonstration train consisted of three cars. In one, lectures were delivered, in another were displayed standard varieties of grain and clover, and the third car accommodated the seed-cleaning machinery. Arrangements were made with the several railways to handle the cars so that they would be at the next stopping-place in time for the staff to commence work at 9.00 a.m.

The object of having this train pass through the different sections of the Province is to get in touch with agriculturists who have hitherto paid very little attention to the grain they have been sowing. In some cases a considerable percentage of their (so-called) seed grain is intermixed with some of the worst weed seeds in Ontario. When it can be demonstrated to these farmers that a modern seed-cleaning machine will remove all these weed seeds and make their own grain and whatever quantity they have for sale much more valuable, they will then be found more ready to co-operate in carrying out the provisions of the Weed Control Act, which must be universally observed if the best results are to be obtained.

Last year at the convention there was a motion passed that Bladder Campion be placed on the list of primary noxious weeds. This has now been done as it is recognized that this weed is a great menace to farmers owing to its rapid spread.

ONTARIO PLOUGHMEN'S ASSOCIATION

An ever-increasing interest is being taken each year in the work of this association and its branches, organized as they are all over the Province. Not only does the great international ploughing match draw tens of thousands from far and wide, but the local matches are also the centres which attract large numbers of interested onlookers, not only from the farms, but also from the towns and cities adjoining, thus certifying that citizens, too, recognize the importance of this phase of agriculture to the welfare of the Dominion. Better ploughing means better crops and better crops result in a more contented population, and a higher standard of living.

At the provincial ploughing match which was held adjoining the city of London, in Middlesex County, was seen the finest and largest farm machinery demonstration yet staged. Threshing, ditching, seed-cleaning machines and all types of power machines were in evidence and the multiple hitch with 4, 6 and 12 horses driven by one man with one set of lines was an attractive feature, and was put on through the assistance given by the Federal and Provincial Departments of Agriculture. The Hydro-Electric System had, as in other years, a 100-foot tent filled with all the varied appliances used on Ontario farms and in Ontario farm homes. Milking, washing and pumping machines and every conceivable household appliance was there, and through the courtesy of the official in charge, water was pumped to different sections of the grounds by hydro power.

No side-shows, midways, or fakirs running their gambling devices were allowed to operate on the grounds. The only amusement was a horse-shoe pitching contest for the farmer boys and it attracted considerable attention. It is a farmers' game of skill and is being encouraged in nearly every section of the rural parts of the Province. It was estimated by those who were in a position to judge that there were nearly 100,000 persons on the grounds; in this number there were many thousand farmers' wives and daughters. Two large tents were erected on the grounds by enterprising patrons, and tea and light lunches were served in each of these tents free of charge during the afternoons. Thousands of ladies who honoured the ploughmen with their presence took advantage of this new departure during the four days of the demonstration.

For the first time in the history of the Ontario Ploughmen's Association, a short course for ploughing judges was held on Welwood Farm in Middlesex County. This proved of educational value, as our judges are endeavouring to arrive at a standard and uniform system of judging at matches.

Another feature that is worthy of note is the short courses held in each township for the plough boys of Middlesex County, giving them an idea of the value and outstanding principles of good ploughmanship, and the result of these courses was a large number of local contestants who took part in the competition from that fine farming constituency. These courses were in charge of competent instructors from the Department.

This great annual demonstration of the Ontario Ploughmen's Association is looked forward to with the keenest interest by the stalwart farmers of Ontario and city dwellers as well. Nearly 300 ploughmen entered in the competitions, and over $7,000 were offered in prizes. Over eighty plough teams were furnished by the farmers of Middlesex County for the ploughboys from outlying sections of this province. To show the interest taken, one farmer drove his team and plough in a lumber wagon over 100 miles to take part in the proceedings. Many of the old-time implements drawn by oxen that were used by stalwart pioneers were in evidence, and were of interest to the younger generation.

LIVE STOCK BRANCH

During the year a new policy in sheep extension was adopted whereby small flocks of breeding ewes were placed with young farmers on whose farms sheep were not being kept. We endeavoured to organize clubs of at least ten members having a common shipping point, and to each member of such club five breeding ewes were given. The use of a pure-bred ram was also supplied by the Department.

An agreement was entered into between the club member and the Live Stock Branch whereby the club member, on following approved practices of sheep husbandry and upon making returns in the form of market lambs for a period of four years following the year of the formation of the club, would receive the right and title to the entire flock.

Under this policy the following table gives a summary of the flocks placed in 1928:

County	Name of Club	No. of Members
Grey	Markdale	8
Haldimand	Cayuga	14
Haldimand	Dunnville	11
Hastings	Stirling	16
Lanark	Ferguson's Falls	12
Lanark	Lanark	16
Renfrew	Douglas	12
Renfrew	Eganville	12
Simcoe	Carley	10
Simcoe	Oro	11
Simcoe	Phelpston	9
Wellington	Arthur and Maryboro	12
Wellington	Minto	11

BACON HOG CLUBS

The work begun under this head in 1922 has been carried on aggressively during the year 1928. Rather than extend operations over a larger field it has been aimed to consolidate the work more effectively in districts and thereby enable the field-man to give more time to the checking of the breeding qualities of the boars and the members of the clubs more assistance in the selection of breeding stock and with their general swine problems. Clubs that, owing to changed conditions in the districts, have not been functioning with a maximum of usefulness have been disbanded and a few new clubs organized. The number of clubs and the counties in which they are located are given in the list which follows:

County	No. of Clubs
Brant	8
Bruce	13
Carleton	5
Dufferin	4
Elgin	9
Essex	5
Glengarry	2
Grey	27
Haldimand	5
Halton	10
Hastings	14
Huron	7
Kent	7
Lambton	6
Lanark	6
Leeds	3
Lennox and Addington	2
Middlesex	12
Muskoka and Parry Sound	1
Norfolk	3
Northumberland	17
Ontario	2
Oxford	11
Peel	4
Perth	18
Peterborough	4
Prescott and Russell	2
Prince Edward	2
Renfrew	3
North Simcoe	11
South Simcoe	13
Thunder Bay	4
Victoria	6
Waterloo	17
Wellington	15
Wentworth	8
York	3
Total	289

During the year ninety-eight boars were bought at an average price of $42.87 per head. These were delivered freight or express prepaid to the nearest railway station of the clubs, and to provide for this service and the interchange of boars between clubs, the Department paid $649.52.

Some very interesting evidence of the very splendid breeding qualities of the boars purchased under this policy during the past six years is to be found in the winnings of some of the progeny at the larger shows. In the Yorkshire classes at the Canadian National Exhibition in 1928, the major portion of the prizes was awarded to the progeny of boars owned by the Department and loaned to clubs. The Grand Champion Yorkshire Boar at both the Canadian National Exhibition and the Royal Winter Fair of 1928 was bred from club boars on both sides, and by a breeder in a district which previous to the inauguration of the Bacon Hog Club policy produced a very ordinary class of market hog, and did not have a pure-bred breeder in the whole district. Now a number of the most promising young breeders and showmen operate in that section.

The records kept in connection with this Bacon Hog Club work reveal some interesting facts in connection with the use among pure-bred breeders at any one time of the blood of any strain of a breed that happens to gain prominence in the show ring. At the present time the blood of one boar predominates in the sires being used in pure-bred herds. It has been the aim to select from among our best breeding boars those sires which when made available to pure-bred breeders may provide for such changes of blood as will assure a virile seed stock.

The special bacon hog fairs which have been held in the past in co-operation with the Dominion Department of Agriculture have been continued in 1928. Five such fairs were held at the following points:

Caledon East	Peel
Simcoe	Norfolk
Ilderton	Middlesex
Campbellford	Northumberland
Orono	Durham

It was felt that in view of the very close relationship between feed costs and the selling price of market hogs the interest in these fairs would not be keen. This was not found to be the case. The entries were as numerous as in former years and the general quality indicated a steady improvement.

In co-operation with the Provincial Zoologist some very interesting investigational work was conducted among swine herds throughout the Province, particularly in the eastern section. Public meetings and demonstrations were held at a number of club centres and much valuable information on health and parasitic problems among swine given. The Bacon Hog Club formed a splendid medium of contact for this very necessary work.

LIVE STOCK IMPROVEMENT

The Live Stock Branch has continued to work through the agricultural representatives of the Province in live stock improvement work. To this end live stock improvement associations have been formed in many of the best live stock counties, and, while other lines of activity have been followed, the major project before these improvement associations is in the elimination of grade or scrub bulls and the replacing of same by good pure-bred bulls.

To assist in this work the Ontario Live Stock Branch by Order-in-Council is enabled to pay a bonus of twenty per cent. of the cost price of an approved pure-bred bull when purchased through a live stock improvement association by a farmer who has not previously owned a pure-bred bull. While this bonus has acted as a stimulus in the exchanging of bulls, in many cases the bonus has not been applied for. The following table shows the bonuses paid during the year ending October 31st, 1928.

County	No. of Applications for bonus	Amount of Bonus
Lambton	17	$365 00
Middlesex	10	242 00
Bruce	2	40 50
North Simcoe	2	40 00
Lennox and Addington	1	16 00
Haldimand	2	39 00
Essex	4	92 00
Peel	9	220 00
Perth	37	750 90
	84	$1,805 40

In the counties of Oxford, Wellington and Perth, a census of the bulls being maintained within the county shows that over eighty per cent. of these bulls are pure-bred. Consequently, the county council of these counties took action and constituted these counties as better bull areas under the Protection of Cattle Act.

As an illustration of the work which is carried on by some of these improvement associations, it is interesting to note in the report of the Agricultural Representative for Perth County that he states as follows:—

"After six years of extensive live stock work with cattle, conducted in conjunction with the Perth County Live Stock Improvement Association, we reached the position of having our 80 per cent. pure bred sires and were able to go to our county council and ask them to pass a by-law making Perth County a "Better Bull Area."

During the campaign approximately 400 grade sires have been removed from the county. We feel very proud of the fact that within a period of six years this county should make such a satisfactory clean up and be in a position to be second county in Ontario to be declared a 'Better Bull Area.' "

The following table shows the result of the work in the elimination of poor bulls in Oxford County since its inauguration in 1921:—

Year	Registered Pure Bred	Unregistered Pure Bred	Grade
1921	1,174	299	559
1922	1,200	261	427
1923	1,190	204	339
1924	1,169	255	306
1925	1,214	247	194
1926 and 1927	1,561	291	95
1927 and 1928	1,365	432	142

During the year ending October 31st, 1928, by Order-in-Council the Live Stock Branch was authorized to assist settlers in Northern Ontario in the securing of approved pure-bred bulls for the upbuilding of their cattle. To this end a grant of thirty per cent. of the purchase price of the approved bull is paid to the purchaser together with the freight charges on same. This policy became effective in the spring of 1928, and the following table shows the bulls which have been purchased under this policy:—

TABLE SHOWING BULLS BY BREEDS

Breed	Number Bulls Purchased	Total Purchase Price	Average Purchase Price
Shorthorn	10	$1,689 40	$168 94
Hereford	1	125 00	125 00
Holstein	5	590 00	118 00
Ayrshire	4	260 00	65 00
Guernsey	1	125 00	125 00
	21	$2,789 40	$132 82

PLACING OF BULLS BY DISTRICTS

District	Breed	No. of Bulls
Algoma	Holstein	1
Cochrane	Ayrshire	4
Manitoulin	Shorthorn	2
Muskoka	Shorthorn	2
Muskoka	Holstein	2
Muskoka	Hereford	1
Muskoka	Guernsey	1
Nipissing	Shorthorn	1
Rainy River	Holstein	1
Temiskaming	Shorthorn	5
Temiskaming	Holstein	1

STALLION ENROLMENT

During the season of 1928 there were 1,282 stallions enrolled, which is an increase of twenty-two stallions from the preceding year. The following certificates were granted: 157 A 1; 421 approved Form 1; 570 passed Form 1; and 134 defective Form 2. Out of this total number of stallions, 157 are enrolled as premium sires for the season of 1928. During the fiscal year just ending, cash premiums were paid to stallion owners on seventy-three stallions which stood for service during the season of 1927.

ONTARIO PROVINCIAL WINTER FAIR

The Ontario Provincial Winter Fair was held in Guelph, December 5th to December 8th, inclusive, 1927. The increased interest and attendance, evidenced so markedly in 1926, were again shown in 1927, with an increased attendance, as intimated by the gate receipts, and increased entries in many sections. The light horse show, which was so well begun in 1926, was continued in 1927, and the horse entries in both heavy and light sections taxed the accommodation.

ONTARIO PROVINCIAL WINTER FAIR, GUELPH

Summary of Entries and Gate Receipts, 1918 to 1927

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
Heavy Horses	305	282	256	286	225	191	254	146	225	240
Light Horses	93	60	44	50	51	35	32	43	194	252
Beef Cattle	260	270	312	367	387	317	305	280	257	312
Beef Carcases	.....	.....	.....	.....	.....	.....	.....	.....	11	5
Dairy Cattle	134	134	74	101	99	87	38	88	40	26
Sheep	588	536	536	716	768	581	424	408	419	398
Sheep Carcasses	96	93	96	121	179	112	81	96	100	99
Wool	29	49	40	43	54	42	41	40	38	35
Swine	302	302	301	287	391	273	153	184	199	173
Swine Carcasses	45	48	34	33	134	34	45	48	63	42
Seeds	394	350	291	282	295	308	372	334	262	211
Fowls	4,730	5,066	3,918	4,154	3,817	1,570	794	1,297	1,423	1,437
Turkeys and Water Fowl	455	449	367	441	372	458	359	456	383	408
Pigeons and Pet Stock	1,002	1,072	587	715	763	378	247	227	261	308
Dressed Poultry	136	179	186	277	273	290	145	177	111	150
	$	$	$	$	$	$	$	$	$	$
Gate Receipts	2,770	4,380	7,984	6,202	5,286	2,826	2,813	2,081	3,685	4,944

PREMIUMS TO PURE-BRED STALLIONS

During the fiscal year ending October 31st, 1928, the new federal-provincial premium policy for stallions was inaugurated upon a mutual agreement between the Dominion and Ontario Departments of Agriculture. Under this agreement the amount of premium paid to premium stallions has been increased approximately 100 per cent., each Department sharing equally in the total premium paid. This premium policy has necessitated further inspection of all stallions recommended for premiums by the regular inspectors under the Ontario Stallion Enrolment Act. With the increased premium it is hoped that sufficient assistance is now being given to stallion owners in Ontario to induce them to purchase stallions of outstanding excellence so that they may receive assistance under this premium policy and that good stallions already in Ontario will continue to remain here for breeding purposes because of the assistance rendered under this policy.

Premiums paid to stallions in 1928 on their breeding report for the season of 1927 is given below, which shows that $8,490 has been paid for premium horses in the Province of Ontario for 1927.

Number of In-Foal Mares	No. of Stallions Qualifying	Amount of Premium Granted
15 to 20	4	$30 00
21 to 30	10	60 00
31 to 40	14	90 00
41 to 50	8	120 00
51 and over	37	150 00

SUMMARY FOR THE PROVINCE OF ONTARIO SHOWING BY COUNTIES THE NUMBER OF DIFFERENT BREEDS OF STALLIONS ENROLLED DURING 1928

County	Clydesdale	Percheron	Standard Bred	Belgian Draft	Thoroug' bred	Hackney	French Canadian	Shire	Suffolk	French Coach	German Coach	Ponies & Morgans	Total Horses Enrolled
Brant	4	5	2		1								12
Bruce	36	12	10	1	1		1						61
Carleton	16	11	4	6		1	1						39
Dufferin	19	5	1			1					1		27
Dundas	6	2	5										13
Durham	19	8	4	1		1							33
Elgin	4	8	2										14
Essex	6	20	1	1									28
Frontenac	1	5	4				2	1					13
Glengarry	6	1	1	2		1	1						12
Grenville	2	5	3			1							11
Grey	33	9	7	1		2		1					53
Haldimand	9	7	2	1									19
Halton	4	3	2		1	1							11
Hastings	6	12	5	3			1				1		28
Huron	27	21	15	1					1				65
Kent	8	16	4	5									33
Lambton	30	9	6			1							46
Lanark	13	6	3	4				1					27
Leeds	5	9	6	2									22
Lennox and Addington	3	3	4										10
Lincoln	2	4	1	2									9
Middlesex	25	29	17	1	1						1		74
Norfolk	6	6		1		3							16
Northumberland	10	8			3				1				22
Ontario	26	4	3	1		2	1						37
Oxford	4	13	5			1							23
Peel	24	19	1	4	1				2				51
Perth	23	13	8	2		3					1		50
Peterborough	15	9	3	3		2							32
Prescott	8	6	1	1		1	1				1		19
Prince Edward	2	10	2	1									15
Renfrew	20	14	1	2									37
Russell	7	10		5		2				1			25
Simcoe	26	10	8	1				1					46
Stormont	4	5	2			1	3						15
Victoria	17	8	1										26
Waterloo	9	10	4	5	1		1						30
Welland	1		1	2	1								5
Wellington	28	9	4			2						1	44
Wentworth	2	1	1	1		1							6
York	21	16	5	1	16	5							64
New Ontario	21	27	2			1	1				1		53
Outside Points	3	2		1									6
Total	561	410	161	62	20	33	13	4	4	1	6	1	1,282

The Clydesdale stallion "Mainring," which is owned by this department, stood during the past season in the County of Middlesex. During the season of 1928 thirteen mares were bred. Unfortunately this stallion is not proving satisfactory at service, which has been a great disappointment to many, as much was expected of him.

HORSE SHOWS

The following horse shows have received grants during the fiscal year November 1st, 1927, to October 31st, 1928:

Association	Grant	No. of Entries	Prize Money
Elora	$50 00	37	$193 00
Drayton	50 00	27	103 00
Clinton	100 00	91	456 00
Ottawa Horse Parade	100 00	..	....
St. Clements Horse Parade	100 00	46	143 00
Toronto Open Air	300 00	..	....
Linwood Spring Horse Show	100 00	39	127 00
	$800 00		

LIVE STOCK EXPOSITION WINNINGS AT CHICAGO, ILL., 1928

Ontario was represented in the Shorthorn classes at the 1928 International Show at Chicago by two Ontario exhibitors, Mr. Duncan Campbell, of Moffat, and Mr. T. A. Russell, of Downsview. The following table shows the winnings of these two exhibitors in the various classes:

SHORTHORNS

Class	Total Entries	Ontario Prizes	Owner
Bull calved before June 1, 1925	10	2nd	D. Campbell
Bull calved between June 1 and May 31, 1926	8	4th	T. A. Russell
Bull calved between Jan. 1 and May 31, 1927	16	10th	T. A. Russell
Bull calved between June 1 and Sept. 30, 1927	21	6th	D. Campbell
Bull calved between June 1 and Sept. 30th, 1927	21	7th	T. A. Russell
Bull calved between Oct. 1 and Dec. 31, 1927	19	1st	D. Campbell
Bull calved after Jan. 1, 1928	19	5th	D. Campbell
Cow calved between June 1, 1925 and May 31, 1926	13	2nd	T. A. Russell
Cow calved between June 1, 1925 and May 31, 1926	13	7th	D. Campbell
Heifer calved between Jan. 1 and May 31, 1927	18	2nd	T. A. Russell
Heifer calved between June 1 and Sept. 30, 1927	16	9th	T. A. Russell
Heifer calved between Oct. 1 and Dec. 31, 1927	19	3rd	D. Campbell
Heifer calved after Jan. 1, 1928	14	9th	T. A. Russell
Cow calved before June 1, 1925 with calf at side calved after Oct. 1, 1927	6	4th	T. A. Russell
Three bulls	15	3rd	D. Campbell
Aged Herd	7	4th	T. A. Russell
Yearling herd	8	3rd	T. A. Russell
Get of Sire	8	4th	T. A. Russell
Emilio R. Casares Trophy, offered for the champion bull calf, senior and junior calves being eligible	.....	.....	D. Campbell

SHEEP

Through the assistance given by the Ontario Department of Agriculture to the Ontario Sheep Breeders' Association a provincial exhibit of sheep was sent to Chicago to compete at the 1928 exhibition. The following tables give a summary of the excellent showing made by Ontario exhibitors in competition with the leading flocks from United States. Undoubtedly this policy of exhibiting sheep at Chicago on the part of Ontario breeders has done much to advertise Ontario flocks and has stimulated trade with American buyers. This is particularly noticeable in regard to the export of long wool rams by Ontario breeders to the western States, where these rams are used for crossing on Merino ewes to improve the length of sample and weight of fleeces.

Breeding Classes

Breed	Ontario exhibitors	Total exhibitors	Total 1st prizes	Ontario competed for	Ontario Won						
					1st	2nd	3rd	4th	5th	Championship	Res. Championship
Oxfords	1	12	8	7	7	1	1	1	1	2	1
Lincolns	2	5	8	8	5	6	5	1	2	2	0
Cotswolds	1	6	8	8	5	3	2	1	2	1	1
Southdowns	3	10	8	8	4	6	5	2	1	1	1
Leicesters	1	3	8	8	7	4	1	1	0	2	1
	8	36	40	39	28	20	14	6	6	8 out of 10	4 out of 10

Fat Classes

Breed	Total 1st prizes	Ontario competed for	Ontario exhibitors	Total exhibitors	Ontario Won						
					1st	2nd	3rd	4th	5th	Championship	Res. Championship
Oxfords	3	3	2	11	2	2	0	1	0	0	1
Lincolns	3	3	3	5	3	3	2	2	0	1	1
Cotswolds	3	3	2	5	1	2	2	2	1	1	0
Leicesters	3	3	2	4	3	2	1	0	0	1	1
Southdowns	3	3	3	20	0	0	0	0	0	0	0
Grades and crosses, medium wool	4	2	2	21	0	0	0	0	0	0	0
Grades and crosses, long wool	4	4	4	7	4	4	4	2	1	1	1
	23	21	18	73	13	13	9	7	2	4 out of 7	4 out of 7

DAIRY CATTLE WINNINGS AT THE NATIONAL DAIRY DAIRY SHOW, 1928

During the year ending October 31st, 1928, the Ontario Cattle Breeders' Association made an exhibit of Jersey cattle at the National Dairy Show which was held in Memphis, Tennessee. These cattle were given an excellent location in the show and were nicely fitted with blankets advertising the province. The stable was well decorated and the exhibit drew very favourable comment from the many visitors at the show. The following gives a list of the winnings:

Bull calves:
5th Prize—W. G. Moncrieff, Niagara-on-the-Lake.

Junior Yearlings:
1st Prize—E. W. Nesbitt, Woodstock.

Senior Yearlings:
1st Prize—J. W. Innes, Woodstock.
3rd Prize—Norman Dedels, Breslau.
5th Prize—Douglas Thomson, Brooklin.

Two-year-olds:
None from Ontario.

Three-year-olds:
4th Prize—F. H. Silcox, Iona.
5th Prize—Field Lodge Farm, Roseneath.

Aged Bulls:
2nd Prize—B. H. Bull & Son, Brampton.

Aged Cows:
10th Prize—J. W. Innes, Woodstock.

Four-year-olds:
8th Prize—B. H. Bull & Son, Brampton.
10th Prize—Douglas Thomson, Brooklin.
11th Prize—E. W. Nesbitt, Woodstock.

Three-year-olds:
8th Prize—Douglas Thomson, Brooklin.

Two-year-olds:
1st Prize—B. H. Bull & Son, Brampton.
3rd Prize—John Pringle, London.

Senior yearling heifers:
11th Prize—John Pringle, London.
12th Prize—A. T. Little, London.

Junior yearling heifers:
9th Prize—Queen Alexandra Sanatorium, Byron.
12th Prize—J. W. Innes, Woodstock.

Heifer calves:
2nd Prize—Field Lodge Farm, Roseneath.
6th Prize—B. H. Bull & Son, Brampton.

State Herd: (7 entries).
3rd Prize—Ontario.

In addition to the prizes which were won by the Ontario breeders, many of the cattle which were awarded prizes for American exhibitors were purchased in the Province of Ontario. This includes the Grand Champion Cow of the Show.

THE DOG TAX AND SHEEP PROTECTION ACT

This Act is becoming more widely and thoroughly known by both sheep owners and municipalities. During the year ending October 31st, 1928, nine appeals have been made under this Act to the Department of Agriculture. Appeals have been received from municipalities as well as from sheep owners. The following counties have been represented in the appeals made: Frontenac, Haldimand, Middlesex, Hastings, Simcoe, Victoria, Bruce.

RAM CLUBS

The Live Stock Branch has continued to carry on the policy of sheep extension through ram clubs which were organized in selected districts. During 1928 four ram clubs were in operation, namely, one club in Rainy River Section, two clubs on Manitoulin Island, one club at Little Current and one at Manitowaning, and one club in Lanark County at Franktown.

As a follow-up programme in this work, market lamb fairs were organized, a prize list of approximately $200 being offered at each of these fairs. Co-operation in furnishing prize money was given by the Dominion Live Stock Branch. At the annual lamb fair held at Emo on October 16th, 336 sheep and lambs were exhibited of which 273 head were marketed. Of these, 220 were sold for $13.50 per hundredweight, 33 head for $12.75 per hundredweight, and 20 head for $10.50 per hundredweight. It will be noted that a very high percentage of the lambs offered for sale were graded as No. 1. These lambs would average in weight about 87 pounds, and were a real choice lot of commercial lambs. This work has been much appreciated in the Rainy River section, and through the excellent support rendered by the agricultural representative, co-operative marketing of lambs throughout the district has been a prominent feature of the work. The financial returns which have accrued have been highly satisfactory and have done much to promote the sheep industry in the Rainy River district.

The lamb fair held at Franktown in 1928 is the fourth fair to be held in the district, consequently the period of agreement between the flock owners and the Live Stock Branch has expired. The remaining rams in the club were in most cases sold to farmers for breeding purposes. The lamb fair which was held at Franktown during the past season was the most successful fair which has yet been held in that district. Three hundred and twenty-five sheep were exhibited at this fair and 195 of these were market lambs which were graded and sold. The following gives the table for grades and prices:

	per cwt.
101 choice lambs	$11 00
66 seconds	10 00
17 thirds	10 00
11 feeders	9 00

These prices were f.o.b. Franktown.

In connection with the work carried on in this section, demonstrations in the control of internal and external parasites were given by Dr. Lionel Stevenson, Provincial Zoologist. Considerable trouble has been experienced in this district in the control of stomach and tape worm and these demonstrations were very much appreciated. The agricultural representative in this county states that he is of the opinion that fifty per cent. of the flocks in the country are now being treated at least once a year for internal parasites.

Lamb fairs were held on Manitoulin Island in connection with the two ram clubs organized in this district. Unfortunately, the quality of lamb produced on the island is suffering because of the conditions under which sheep now have to be maintained. The wolf menace on the island has assumed alarming proportions, so much so that some farmers have discontinued keeping sheep, while others find it necessary to pen their sheep at nights as a matter of protection. Under this latter condition the lambs when brought to market in the fall do not show the finish that would exist if the sheep had free range at all times. Furthermore, by keeping sheep under confined conditions parasites are causing more losses than when sheep were allowed free range.

It is interesting to note that wolves are being caught on the island in increasing numbers in spite of the fact that the local bounty has been decreased. Since October, 1928, the local bounty stands at $15.00 for adult wolves and $7.50 for pups. For the year ending October 31st, 1926, 76 wolves were accounted for; for the year ending October 31st, 1927, 67 wolves were killed; and for the year ending October 31st, 1928, 85 wolves were killed. Since October, 1928 to February, 1929, 45 more wolves have been accounted for. Thus, in a little over three years the local committee on the island has paid a bounty of 273 wolves. The greatest number of wolves killed by any one man on the island during the year ending October, 1928, was ten.

The following tables show the results of the marketings of the lamb fairs at Manitowaning and Little Current:—

MANITOWANING LAMB FAIR—Sold October 3rd, 1928

No. Head	Grades	Weight	Average weight	Price	Amount
54	1	4,212	78	$13 50	$568 62
1	2	78	.....	13 50	10 53
68	2	5,400	79.8	12 25	661 50
4	2	352		11 25	39 60
85	3	7,498	87.5	11 25	843 52
2	3	119		10 00	11 90
30	4	1,771	59	10 00	177 10
3	ewes	470	.....	6 00	28 20
2	"	335	.....	6 00	20 10
1	"	125	.....	3 00	3 75
1	"	155	.....	5 00	7 75
251		20,515			$2,372 57

AVERAGE PRICES

Grade 1	$13 50
Grade 2	12.2064
Grade 3	11.2304
Grade 4	10.00
7 ewes at	5.5152

EXPENSES

Freight	$209 88	
Transit Insurance	20 08	
Unloading	3 00	
Fire Insurance	45	
Yardage	12 55	
Co. service	2 55	
Commission	30 00	
		$278 51
		$2,094 06

Grade	Weight at Manitowaning	Weight at Stock Yard	Amount of Shrink	Percentage Shrink
1	4,664	4,290	374	8.01
2	6,225	5,752	473	7.59
3	8,181	7,617	564	6.8
4	1,902	1,771	131	6.9
Ewes	1,192	1,085	107	8.9
	22,164	20,515	Average % Shrink..	7.4

LITTLE CURRENT LAMB FAIR—Sold October 1st, 1928

No. Head	Grade	Weight	Average weight	Price	Amount
62	1	4,780	7,709	$14 00	$669 20
47	2	3,680	7,517	12 75	469 20
29	3	2,750	9,482	12 00	330 00
1	3	85	.....	10 00	8 50
59	4	3,630	6,125	11 50	417 45
1	4	60	.....	8 00	4 80
1 ewe	.....	165	.....	6 00	9 90
6 "	.....	690	.....	3 00	20 70
1 "	.....	140	.....	6 00	8 40
5 "	.....	500	.....	4 00	20 00
212		16,480			$1,958 15

AVERAGE PRICES

Grade No. 1	$14.00
Grade No. 2	12.75
Grade No. 3	11.94
Grade No. 4	11.443
13 ewes at	3.946

EXPENSES

Freight	$94 25	
Unloading	2 00	
Insurance	30	
Yardage	10 60	
Hay	7 68	
Co. service	1 50	
Commission	20 00	
		$136 33
		$1,821 82

Grade	Weight at Little Current	Weight at Stock Yard	Amount of Shrink	Percentage Shrink
1	5,207	4,780	427	8.2
2	4,015	3,680	335	8.3
3	3,050	2,835	215	7.05
4	4,044	3,690	354	8.7
Ewes	1,682	1,495	187	11.1
	17,998	16,480	1,518	8.2

ASSISTANCE TO AUCTION SALES OF PURE-BRED LIVE STOCK

During the year November 1st, 1927, to October 31st, 1928, assistance has been given to seventeen local associations that have held sales. A total of 639 cattle was sold, and the total assistance given amounted to $2,115.

By an Order-in-Council, dated May 18th, 1928, an allowance of $4 per head was made for tested cattle, providing all cattle at the sale had successfully passed the tuberculosis test and that an affidavit was taken by the contributors to the sale that their herds were free from contagious abortion and other infectious and contagious diseases. The maximum grant in such cases is $150. In sales where the cattle are not all tested for tuberculosis, but are free from abortion or other infectious diseases, the grant remains at $3 per head with a maximum of $100 for any one sale.

CO-OPERATIVE CAR SHIPMENTS OF LIVE STOCK

As a service to breeders of pure-bred stock in Ontario in enabling them to market their animals in Western Canada, the Live Stock Branch maintains a service known as our co-operative car shipments whereby when sufficient stock is sold to purchasers in Western Canada, this stock is assembled, shipped west, and distributed to the purchasers. This service is appreciated not only by our Ontario breeders, but by western buyers.

NUMBER IN EACH SHIPMENT

Year	Horses	Cattle	Sheep	Swine	Total
1908	22	74	14	15	125
1909	25	70	84	4	183
1910	39	51	36	7	133
1911	58	51	51	18	178
1912	51	45	24	20	140
1913	47	71	107	21	246
1914	49	97	34	20	200
1915	28	104	76	8	216
1916	59	185	100	22	366
1917	70	269	196	15	550
1918	67	250	180	4	501
1919	24	154	154	4	336
1920	18	110	37	6	171
1921	1	37	19	5	26
1922	3	18	6	21	48
1923	6	32	9	28	75
1924	1	22	2	..	25
1925	1	12	11	..	24
1926	2	43	33	5	83
1927	3	56	43	..	102
1928	4	46	81	7	138

PURCHASE OF COWS FOR NORTHERN ONTARIO

The Live Stock Branch has, during the past year, continued the co-operation with the Department of Northern Development in the supplying of cows to settlers in Northern Ontario. Five carloads containing seventy-four cows were shipped to Northern Ontario, two carloads being sent to Kapuskasing, two loads to Fort William, and one load to Mileage 103 west of Cochrane.

Since this policy was inaugurated a total of 488 cows and four bulls have been sent to the settlers and in the great majority of cases excellent satisfaction has been given and the service has been much appreciated by the farmers.

LOCAL POULTRY ASSOCIATIONS

Local poultry associations again received assistance from the Department through the supplying of judges, lecturers and grants to associations during the fiscal year, November 1st, 1927, to October 31st, 1928.

Number of associations holding a show during the fiscal year	42
Number of poultry judges supplied	35
Number of lecturers	15
Total amount of grants paid to local associations, November 1st, 1927, to October 31st, 1928	$2,040 00
Total expenditures in connection with local poultry associations—judges, lecturers, grants, confederation, etc	4,130 00

INSTITUTES BRANCH

The Women's Institutes of the Province have continued to carry on along very effective lines during 1928. Branches have been established at fifty-four additional places during the year, and there are now 1,115 branches, with a membership of over 40,000 in the Province, with many inquiries in hand as to how to proceed to organize. The example set by Ontario from 1897 on in establishing organizations for rural women and carrying on successfully has been followed in many other countries, and the Women's Institute is fast becoming a world-wide force in making for better homes, better health, a better agriculture, effective community service, and good citizenship.

A splendid development has been made in South Africa during the year, where they now have 174 branches with a prospect of rapid expansion and development. The work continues to expand and become more effective in practically all overseas dominions and the motherland, as well as in a number of European countries.

The success and permanency of the work in Ontario has been due in large measure to co-operation between the local voluntary organizations and the Institutes Branch, which renders a variety of valuable service to the Institutes and also links them up with other branches of government which have service and literature of value for the rural districts. The Institutes have monthly programmes for education along practical lines and wholesome social life.

WORK OF THE STANDING COMMITTEES

While the services of the Department of Agriculture are being gradually extended and made more effective from year to year, the Institutes have been developing rapidly in so far as their own programmes are concerned. This is set forth in the summarized report of the standing committees as given herewith. We are not only presenting a brief statement of the accomplishments, but an outline of the programme as decided upon by the Institutes.

Health

Programme.—Medical and dental services, health rules and laws, preventive measures and disease, courses in nursing and first aid, diet for corrective purposes and disease, public sanitation, health conferences and exhibits.

Activities.—Healthy growth is shown not only by the actual accomplishments, but by an educational advance, a clear understanding of the needs and a definite working towards their solution. A "Health Day," "Health Week" or "Health Exhibits" have been features of the programmes. Attention has been effectively concentrated on the problems of lessening maternal and child mortality, pre-natal care being frequently furnished by the members themselves and a special study made of the care and feeding of children of the pre-school, school, and adolescent ages. Much use has been made of the departmental literature and courses in nursing, and there has been close co-operation between the doctors, medical officers of health and school nurses. Water has been tested and drinking fountains provided, prizes offered in schools for attendance and cleanliness, hot lunches arranged for and milk supplied to under-nourished children. Best of all, preventive measures, right eating, immunization against disease, medical and dental inspection, fresh air, proper rest and recreation are being emphasized.

Home Economics

Programme.—The study of clothing, feeding and housing, including food values and desirable combinations, clothing requirements, house planning, labour saving equipment, water supply, power, heating and lighting, household budgeting.

Activities.—Papers, demonstrations and discussions on the proper feeding, clothing and housing of the family were features of the monthly meetings. Short courses in foods and cookery, sewing and millinery were given in many branches. Girls' garment clubs were formed and girls' judging competitions in home economics held at centres throughout the Province. Well attended girls' conferences and Women's Institutes conventions for the exchange of ideas on better homemaking took place at fifteen centres. Government bulletins were distributed and widely utilized. Labour saving, family budgeting, plans for new houses were other items of interest, also visits to the schools and colleges of domestic science. Foods and handicraft exhibits were put on at the fall fairs.

Education

Programme.—The utilization of literature—standard works, bulletins, reports, periodicals, etc. Programmes for regular meetings, lecture courses, debates, plays, music. All co-operation with and assistance to the schools, except along "Health" lines and supplies and equipment for school grounds.

Activities.—Decided progress has been made in getting music taught in the public schools and choral clubs established in communities. There has been stimulated interest in community educational measures too, as in the study of current events, League of Nations bulletin, birds, flowers, eradication of weeds and beautification of home grounds, public speaking, debates and essay writing, short courses. Travelling and other libraries are coming more and more into use and university extension is widening its field. Curfew by-laws have been made effective through Institute influence. The monthly meetings have had papers, discussions, and demonstrations on practical subjects—education, citizenship, home economics.

Agriculture

Programme.—All efforts of women and girls to increase the production of the farm or to add to its beautification; tourist camps and other money making undertakings by women and girls on the farm; school fairs, fall fairs and the marketing of produce.

Activities.—By the exchange of seeds, slips, bulbs and roots among members the beauty of country homes and neighbourhoods has been augmented. A healthy public opinion in support of the extermination of weeds campaign is being developed. Horticultural societies have been made use of and encouraged, government bulletins read and distributed and the more attractive and standardized preparation of Ontario apples and potatoes for market urged, also co-operative marketing by women. There was active co-operation with the agricultural representatives, assistance with the short courses, fall fairs, school fairs; also improvement in the farm home, its working equipment and furnishings, and a greatly stimulated interest in pure milk and accredited herds. Accommodation for tourists was a revenue-producing side line on some farms; bee-keeping, chicken, geese, turkey raising, the sale of fruit, flowers, pickles and home-canned goods in others.

Legislation

Programme.—The study of laws, the regulations made thereunder and method of administration, laws concerning inheritance, property rights, marriage, custody of children, orphanages, care of the unfortunate, are of special interest.

Activities.—A study of the laws of Ontario which concern the home and family welfare, such as inheritance, marriages, wills, immigration, pensions, child labour, mothers' allowances, adoption of children, minors and feeble-minded has been an outstanding feature in Institute work. Various family problems have been discussed and in a number of cases the right solutions found. Legislative problems bearing on rural home life were taken up with the Cabinet with satisfactory results. Active interest was taken more than ever before in the doings of school and municipal authorities and in the sessions of the Provincial and Dominion governments. "It is better to educate our people so they will demand good laws than for the government to make the demand," is the view expressed.

Immigration

Programme.—The study of immigration laws and assistance given to immigrants, welcoming newcomers and helping them to get established in community life, teaching the foreign-born the English language and Canadian ways and customs; co-operation with the Children's Aid Society in getting homes for orphan or neglected children.

Activities.—The Institutes have tried to co-operate understandingly with the Government Departments of Immigration and Colonization in helping families and individuals to get successfully "on their feet" where they have settled within reach of a branch.

The question of emigration as well as immigration is of increasing interest to members who in some places put on an annual study of helping young people to find the right life work in Canada.

There has been some co-operation with the Children's Aid Society in securing good homes for children for adoption; in a number of cases individual members have adopted children.

Relief

Programme.—Assistance to the individual or the family in need, homes for the aged, hospitals, children's shelters, and financial help to those requiring special treatment or care.

Activities.—Much effective and humane work has been done in medical aid in Northern Ontario and in clothing for fire sufferers and orphans. Needy school children were equipped to go to day and Sunday schools, blind and crippled children provided with treatment. Assistance was given in sickness, death and maternity cases. Outpost and other hospitals received donations of linen, fruit and funds, in a number of cases a whole room being maintained by local institutes. First aid kits were given to schools and layettes to needy mothers. The short courses in nursing resulted in a considerable amount of voluntary service from members to the afflicted of their own communities.

Community Activities

Programme.—Undertakings in the interests of the whole community, such as providing or maintaining community halls, rest rooms, parks, libraries, fire

equipment, street lights, school grounds, cemeteries, banquets, entertainments, Christmas trees, games, amusements for the whole community.

Activity.—Many community activities are similar to those carried on last year according to programme, with an occasional new venture. Rest rooms in market towns and parks, community halls built, renovated, maintained and improved cemeteries, parks, tourist camps remain in the foreground of interest, as do libraries, the Packet Loan of the O.A.C. being much used. Many have caught the idea of having community Christmas trees, others Hallowe'en frolics to turn youthful energy into constructive rather than depredatory channels. Plays, banquets, entertainments, music festivals, skating rinks and other outdoor recreation have been part of the work. A banquet was held in honour of the Minister of Highways to create a spirit of enthusiasm among the members for a highway wanted to come in that direction.

Historical Research

Programme.—Making collections of historical records and articles; compiling local and township history of individuals, industries, customs, developments; making records of interesting current events; exhibits of antiques; co-operating with the Provincial Archivist.

Activities.—Many branches have an historical research committee and are aiming at a readable and comprehensive history of their own townships and counties, while roll calls giving briefly the history of the farms have been a feature of programmes. In some cases these records are being stored in the history department of the University or the Government archives, in others, preserved locally in libraries or museums. Considerable local history is being printed in local papers. Collections of antiques bearing on the pioneer history of Ontario have been made and historic sites marked with tablets. The history of villages, townships, farms, homes, churches, industries, schools, families is thus being to some extent preserved. Grandmothers' days with stories and exhibits of old times are an annual feature of many branches. Current events, too, have been studied and the current doings of municipal councils, legislatures and school boards observed. Altogether a very lively interest in history past, or in the making, is being developed.

Canadian Industries

Programme.—A study of the natural resources and industries of the locality, the Province and the Dominion. The comparison of imported and home-made articles as to quality and price. To encourage the purchase and use of Canadian goods where the values compare favourable with the price and quality of imported articles. Study of trade methods.

Activities.—A study of the resources of Canada was made and an intelligent grasp gained of the reasons for encouraging home trade by buying Canadian made goods when quality and price compare well with imported articles. An exhibit of Canadian manufactured goods was put on at several area conventions which proved enlightening to the delegates and public generally.

PUBLICITY

The institutes advertise their educational programmes in the community through printed cards, bulletin boards, telephone, and the local press. Cordial relations exist between them and the city dailies and country weeklies which give much appreciated publicity to worth-while social activities in branch and district throughout the Province.

The agricultural press of the Province is ready at all times to publish Institute news of general interest, and this co-operation has done much to create a more general interest in the work and to stimulate the branches to more effective effort.

DEMONSTRATION LECTURE COURSES

Over 9,000 girls and women took advantage of the systematic instruction given in the short courses in "Food Values and Cookery," "Home Nursing and First Aid," "Sewing" and "Millinery." In the rural districts, where for the most part there are no other opportunities for education along the lines covered, there is keen appreciation of the services being rendered by the Department of Agriculture through the regular courses, consisting of ten lessons covering a period of two weeks, the one-month and the three-months courses.

The programmes for the regular demonstration lecture courses are as follows:

Food Values and Cookery

Food values, preparing, cooking and serving food, with emphasis on the value of food in relation to health. The lessons cover—vegetables, fresh and dried; fruits, eggs, milk (with special instruction as to children's and invalids' diets); cereals and cheese; meat (uses of different cuts); meat substitutes, bread, biscuits, etc., desserts, salads.

Home Nursing and First Aid

The object of this course is to enable women to obtain a knowledge of how to care for the sick in the home, what to do in an emergency and how to do it, how to render assistance to the doctor, or to the nurse where such service is necessary. The lessons include—general instruction in daily health; national and personal hygiene; selection and care of the sick room, taking the temperature, pulse and respiration, keeping records, preventative measures; home sanitation and ventilation; the uses of water internally and externally; baths and packs; local applications—hot and cold; poultice making, nursing in isolation cases; disinfecting and fumigating; how to treat fractures of various kinds, dislocations, sprains, artificial respiration, checking of hemorrhages, dressing wounds in common emergencies; the mother and baby—prenatal care, preparation for child-birth, care of mother and baby.

Sewing

Plain and fancy stitches; the use and care of the sewing machine; finishings, bindings, pockets, collars, plackets, gussets, use of patterns and the making of a dress; renovating, purchase of materials, setting colours, shrinking and pressing goods, etc.

Courses held from November 1, 1927, to October 31, 1928.

Nature of Course	Number		Persons taking Instruction	
Millinery				
Regular	23		379	
1 month	8		281	
3 months	6		283	
		37		943
Sewing				
Regular	92		1,780	
1 months	23		840	
3 months	6		283	
		121		2,903

Nature of Course	Number		Persons taking Instruction	
Food Values and Cookery				
Regular	50		1,681	
1 month	32		1,135	
3 months	6		283	
		88		3,099
Home Nursing and First Aid				
Regular	37		1,144	
1 month	27		1,006	
3 months	6		283	
		70		2,433
		316		9,378

SUMMER SERIES OF MEETINGS

During the last two weeks of May and throughout June, a staff of lecturers thoroughly familiar with Institute aims, programmes, methods and accomplishments, and specially qualified to give up-to-date information along one or more lines of practical value to homemakers, gave addresses at some 749 centres. The members of many of the institutes not included in the list attended meetings at neighbouring branches. Some of the subjects for addresses and discussions were:

A Mother's First Duty to Herself.
In Training for Health, Beauty and Happiness.
The Value of Temperature, Pulse and Respiration.
Full Value out of a Garden.
What to Eat and How to Serve it.
Treasures from an Old Scrap Book.
Historic Research.
The Well-Balanced Institute.
A House and a Home.
A Few Food Facts.
Old Age Retarded.
The Physical Development of the Child.
How to Conduct a Meeting and Utilize the Talents of the Members.
The Value of the School Nurse to the Community.
Libraries, Music and Debates.
Cake-Making and Baking.
A Balanced Ration of Work, Pleasure, Exercise and Rest.
The Principles of Dress.
A Girl's Preparation for Life.
Books for Children.
Amusements and Games for the Rural Community.
Making the Institute Serve the Community.
Those Nerves of Ours.
Eating for Beauty and Efficiency.
Helping Boys and Girls to Find the Right Life Work.
Working Your Own Gold Mine.
A Mother to the Community.
The Child, the Parent, and the Teacher.
Opportunities for the Rural Girl.
Efficiency and Self-control as a Science.
The Institute as a Builder in National Life.
The Utilization of Colour and its effect on the Individual.
House-Planning, Furnishing and Decoration.
Relation of the W.I. to the Public School.
Business Principles and Methods.
Hospitality—The Old and the New.
Farm Poultry—Selecting the Layers and Dressing—Demonstrated.
Respect for my Job; or the Market Value of a Homemaker.
How to Meet Medical and Surgical Emergencies.
Programes and Projects for Junior Institutes.
Keeping out of Ruts.
Putting Unity into the Community.

The annual visit by a representative of the Department provides in many instances the only direct contact between the departmental staff and the local branches during the year, and as a result of this contact, the officers and members in many branches adopt features in their regular monthly programme which make the work of the organization more effective.

DISTRICT ANNUAL MEETINGS

The 1,115 branch Institutes of the province are consolidated in 100 district organizations, with officers appointed by representatives from the branches concerned. The annual district meeting provides an occasion for presenting reports, outlining methods of work, surveying the needs of the various communities, and offering suggestions for making the work more effective in the individual branch as well as throughout the district.

Special speakers were provided by the Institutes Branch for a number of these meetings, while the representative of the Provincial Board for the area concerned attended to report on the activities of the Board and to encourage the branches to more progressive work.

ANNUAL CONVENTIONS

Conventions were held at the following places during the fall:

Place	Counties and Districts Represented	Date	Attendance
Swastika	Temiskaming (N.C.S.)	Sept. 12, 13	90
Port Sydney	Muskoka and Parry Sound	Sept. 13, 14	150
Emo	Rainy River, Kenora and Thunder Bay	Sept. 26, 27	200
Desbarats	Algoma and St. Joseph Island	Oct. 4, 5	85
Little Current	Manitoulin Island	Oct. 10	125
Walkerton	Bruce, E. & W. Huron, N. Perth	Oct. 17, 18	300
Kingston	Addington, Amherst Island, Brockville, Frontenac, Lennox, Leeds	Oct. 25, 26	320
Ottawa	Dundas, Glengarry, Grenville, Stormont, Carleton, Lanark, Renfrew, Russell	Oct. 30, 31 Nov. 1	210
London	Lambton, Middlesex, S. Perth, Essex, Elgin, Kent S. Huron	Nov. 6, 7, 8	420
Hamilton	Oxford S., Haldimand, Lincoln, Welland, Waterloo, Wentworth, Brant, Norfolk	Nov. 13, 14, 15	450
Belleville	Hastings, Northumberland, Prince Edward	Nov. 15, 16	300
Toronto	Durham, Haliburton, Peterboro, Victoria, Ontario, York, Dufferin, Grey, Halton, Peel, Wellington, Simcoe and Muskoka	Nov. 27, 28, 29	600
			3,250

The number of conventions has been increased during recent years with a view to providing an opportunity for the busy women who cannot afford to be away from home for more than one or two days, to meet with leaders and secure information which would enable them to carry on more effectively in their respective units. The utilization of a large number of members in planning for the conventions, formulating programmes, presenting reports of standing committees and taking part in the discussions, has resulted in rapid development of the splendid talent and executive ability which is to be found in all parts of rural Ontario. There was no difficulty in securing leaders in all twelve areas to accept responsibility and carry on effectively. This is a splendid tribute to the value of the training and experience gained in the Institutes.

JUNIOR INSTITUTES

Our junior Institutes are steadily growing in number of branches and membership, but what is more encouraging is their continued enthusiasm and the scope and breadth of the work which they are undertaking. There are 88 junior branches with a membership of over 2,000. This, of course, does not include the many girls doing excellent work with our senior branches. The junior Institutes are organized on a similar basis to the senior Institutes, and co-operate with them and the junior farmers. They plan programmes of special interest to girls and carry out various practical projects closely associated with their home and community life. The musical festivals, public speaking contests, debates, and judging competitions afford excellent training for the girls and do much to foster a community and county spirit.

GIRLS' JUDGING COMPETITIONS

By means of coaching classes held throughout thirty-one counties prior to county judging competitions, a large number of girls received special lectures and demonstrations in:

Nutrition:
(1) School Lunches
(2) Family menus.

Home Furnishing.
(1) Farm Living Rooms.
(2) Farm Kitchens.

Clothing:
(1) Suitable Costume for Church.
(2) Country Girls' Wardrobe.

Thirty county judging competitions were held with an aggregate attendance of 1,069. Peel County had the largest attendance, with Thunder Bay second, and Temiskaming third. Judging competitions were held during the year at Toronto, Ottawa and London.

The annual provincial competition at Toronto was very popular, and keenly contested by twenty-six county teams and 125 contestants in the open class. Middlesex County team carried off the much coveted cup with the honours, Wellington County, the winners in 1927, holding second place. Eight eastern counties entered the first household science judging competition (intercounty) held at the Central Canada Exhibition, Ottawa. The Frontenac County team received the highest score, Lanark County standing second.

At the Western Fair, London, a competition was held with thirty-four girls competing. Middlesex County won honours for three girls securing highest standing, while an Elgin County girl obtained the highest score.

Judging competitions with the coaching classes have real educational value and should receive the hearty support and co-operation of both the senior and junior Institutes. Girls who have taken an active part in judging competitions realize that the coaching classes open new avenues of interest, and suggest to the keen alert girl special phases of home economics which she may follow up and apply to herself, her home and her community.

The county consciousness aroused by county girls getting together is not an unimportant feature and is emphasized still further at intercounty competitions. They also afford an excellent opportunity for our girls to learn to win without boasting and lose without whining.

GIRLS' GARMENT MAKING CLUBS

The girls' garment making clubs are organized in order to give the rural girl an opportunity to learn the elementary steps in sewing. Through the local branch Institute, a woman or girl with a knowledge of sewing and a gift for leadership is secured to act as a leader and teacher to a group or club of girls from ten to sixteen years of age, or twenty years for second-year work. The girls meet every week or so, carry on their club meeting in a business-like manner, sing their club songs, and cover the course prescribed in the garment making club bulletin. At the close of each session there is an exhibit, when a representative from the Department judges the girls' work, and certificates of achievement are awarded to those who successfully complete the year's course.

Some twenty Institutes conducted garment making clubs during the past year. Club work exhibited at the C.N.E. and various conventions justly merited the highest commendation. A new issue of garment making club booklets was published during the year.

GIRLS' CONFERENCE

Five hundred and twenty-five girls attended the conferences held during the year at Guelph, Kemptville, Cobourg and London.

The three-day conference at Guelph and at Kemptville took the form of a short college term for the girls. The keen interest, hearty co-operation and assistance given by the staff, both at Guelph and Kemptville, were invaluable. The girls entered earnestly into the spirit of the conference, adhering to the limited set of rules, and taking an active part in discussions.

Some of the subjects under discussion were: House planning, income earning, rural health, budgeting, hospitality in the home, community service, beautification of farm home, judging dairy cattle and poultry. Popular demonstrations were given in wax work, paintex and the making of rugs and gloves.

In the one-day conference programme planning and practical projects which might be undertaken by junior Institutes and junior farm girls' organizations were the main features discussed.

These conferences help the girls to meet the challenge given them at one of the conferences "to enrich and beautify rural life and to make the best use of their opportunity, to lead in the wise spending of the farm income, and to lead in beautification and social enrichment through the home, the school, and the church."

SPECIAL MEETINGS

This branch continues to furnish speakers on a variety of agricultural topics for meetings representative of the various lines of agriculture in different sections of the Province. We are asked to furnish fruit men, potato specialists, poultrymen, vegetable growers, seedsmen, and stockmen to attend special meetings of swine and sheep-breeders, dairy men and beef producers. Occasional calls come to hand for speakers to take up special crops, such as tobacco growing, bean production, canning factory crops. Nearly all these meetings are arranged in co-operation with the agricultural representatives. From time to time throughout the year the Women's Institutes make special request for some definite line of instruction, supplementing the regular summer series of meetings and the short courses reported elsewhere. We are usually able to meet these requests.

FRUIT BRANCH

The unusual weather conditions of the past season affected the fruit-grower even more seriously than the general farmer. Continued dull and wet days during the bloom on pears and apples, with late frosts in one of the southern counties, reduced the crops of these fruits very materially. Peaches and plums came through in better condition, with a good crop of most varieties, while grapes also increased materially in volume over 1927. Raspberries and strawberries were lower in production from somewhat weaker condition of the patches in the previous year. The final estimates for Ontario compared with 1927 as given by the Dominion Fruit Branch are as follows:—

	1927	1928
Apples	673,500 barrels	543,970 barrels
Pears	211,300 bus.	126,780 bus.
Peaches	306,180 "	535,800 "
Plums	150,100 "	274,900 "
Grapes	34,560,000 lbs.	52,000,000 lbs.
Raspberries	2,304,000 qts.	1,843,000 qts.
Strawberries	2,644,000 "	2,600,000 "

Quality of all fruits was much better than in 1927 and prices in most lines were more satisfactory to the grower. Owing to the demand from our home markets, the export of apples and pears was still further reduced over the light export of 1927, while that of plums increased.

BRITISH AND CONTINENTAL MARKETS

Owing to very heavy exports of apples from both Canada and the U.S.A., prices on all these markets up to December were very low. In Ontario, the home market demand and prices were such that practically no shipments were offered. A brisk demand from the canneries also absorbed a large amount of varieties like Ben Davis that usually have to find a market abroad.

Under the circumstances, the representative of the Ontario Fruit Growers' Association in Great Britain returned home after completing his work with the shipments of the early fruits, plums and pears. These shipments originated entirely in Burlington and Grimsby and were, on the whole, satisfactory. The only weak link in the handling of these soft fruits is in the cold storage on the ships, correct temperatures not having been maintained, resulting in soft, wasty fruit on arrival or in a lesser number of cases in frozen fruit. The railway companies are to be commended for their handling of this produce, both in rates and transportation service.

Heavy plantings of Japanese plums like Shiro and Burbank have resulted in general low prices here in years of a good crop. While recognizing that this fruit, on account of its early ripening, would come into keen competition with fruit from both English and continental orchards, it was decided to send experimental carload shipments of these varieties to London in 1928 from both Grimsby and Burlington. Part of the Grimsby cars were purchased at Montreal for export. All the Shiro cars went through for sale by the brokers and some small losses were incurred, especially in those shipments that did not receive proper storage on the boats.

Our representative in London reports as follows on these early shipments: "Generally speaking, the conditions of the plum market have not been as good as they were last year or the year before. It seems that enormous quantities of

Idaho prunes have come over, and I am told that the market is flooded with them and they are selling at such low prices, that very heavy losses are being incurred. Last year, Idaho prunes were pretty well off the market by the first week in October, but, this year, on account of prices being so bad, a lot of them were put into cold storage and are still overhanging the market.

"On the whole, however, I do not think that you will find Burlington or Grimsby complaining very severely about prices received for fruit that landed in good condition.

There has been a lot of trouble, however, about the fruit not turning out well when landed from the boats. This year the steamship companies have refused to state any temperatures in their contracts, which leaves them free to do what they like—they seem to have paid little attention to the shippers' request for temperatures of 33 degrees to 37 degrees for plums. I think there has been only one boat that has given good refrigeration service in this regard.

"Temperatures starting at over 40 degrees and working down to 40 degrees or 38 degrees at the best, are not enough. There has only been one ship, according to the thermograph records as far as I have seen them, that received anything like proper attention, and the fruit that was landed from this boat was in very much better shape.

One interesting example that was given, was in the boats that carried the first two carloads of Shiros, which were sent forward by the Niagara Packers, Limited—the S.S. "Aurania" gave a temperature around 40 degrees, the S.S. "Megantic" got down very quickly to 36 degrees. The fruit was the same quality throughout, and was packed and shipped at the same time—the fruit from the S.S. "Aurania" landed over-ripe and that from the "Megantic" shipment arrived in excellent condition. There is no question to my mind but that Shiros can be sent over in first-class shape if they get reasonable refrigeration. I have some doubt about Burbanks, but they have never been properly refrigerated for any shipment that has been sent over, and one cannot come to conclusions on that account.

"In spite of the Burbanks and Shiros arriving in poor condition, however, I am inclined to think that prices received will not be unsatisfactory on the whole. I believe that even though they were not given a fair chance at all, the Burbanks sold to realize better net prices than could be had on the open market.

"*Aurania.*—The temperature of the S.S. "Aurania" shows that the boat started off at a temperature of about 42 degrees, and reduced this to 40 degrees about the end of the second day, then ran along at about 40 degrees until the fifth day, when the temperature dropped between 38 degrees and 39 degrees for the rest of the journey.

"*Megantic.*—The s.s. "Megantic" arived September 3rd, whereas the S.S. "Aurania" arrived September 4th, and showed a temperature much better than the latter, dropping to 38 degrees on the first day and gradually going down to 36 degrees about the third day, then staying around 36 degrees with a drop to 33 degrees on the eighth or ninth day, and up to 36 degrees for the rest of the journey.

The report by cable was that the S.S. "Aurania" arrived with the fruit ripe and the S.S. "Megantic" in excellent condition. The result is shown in the account sales practically the same—the fruit from the "Megantic" realizing £278 as against £222 for the "Aurania."

"While there may be some doubt as to whether Burbanks can be sent over to England with any assurance that they will arrive in condition, there does not

seem to be any doubt that Shiros, if they are given proper refrigeration, will do so. Refrigeration around 40 degrees, however, is not good for any plums. We must get a temperature from 33 degrees to 37 degrees, and this would particularly apply to Shiros or Burbanks.

"'*Alaunia.*'—I am enclosing comments from Messrs. T. J. Poupart, Ltd., on the condition of the fruit that arrived per the S.S. "Alaunia" September 17th. The whole story is one that the fruit arrived in very poor condition, at least as far as the Burbanks were concerned. The Orleans seemed to carry better, but were wasty. The Niagaras were variable also. I have before me the thermograph record of the "Alaunia," which shows that starting at a temperature of 42 degrees they gradually got down to about 38 degrees at the end of the first day, and maintained a temperature of 38 degrees practically all through the voyage, which temperature was too high for these early plums. If the steamship company had given a temperature from 33 degrees to 37 degrees—that is a lower range of temperature of only a few degrees—I believe that the results would have been very different.

"'*Ascania.*'—Arrived September 10th. I am enclosing a report on this shipment, in which the comment is that both varieties of plums arrived in a forward and ripe condition. Boxes which were shipped without pre-cooling were in a worse condition, as far as Burbanks were concerned, than those which had been pre-cooled. In spite of the report of the bad condition of these plums, they did not sell at such bad prices. The prices quoted in the account sales are per bundle, and, considering how bad they say they were, they seem to have done pretty well, in connection with the bulk of them, although some of them are reported as useless, and some sold at pitiable prices. Immediately on my arrival here, I arranged with Messrs. Poupart's to quote the price per tray or per unit, so as not to leave any room for misunderstanding. I have looked over the government thermograph record of the S.S. 'Ascania' and noted that she started at a temperature of about 45 degrees, which was gradually reduced until at the end of four days the temperature got down to 40 degrees, and from then on it ran at 38 degrees to 39 degrees, until about the 9th day, when it got down to 36 degrees. This temperature could not be considered satisfactory for fruit like Shiro and Burbanks. The temperature for this variety, I am quite certain, should not be higher than from 33 degrees to 37 degrees at any time during the voyage.

"'*Calgaric.*—September 22nd. I am enclosing letter from Messrs. T. J. Poupart, Ltd., of Liverpool, which gives information in very considerable detail. The condition of the Burbanks seems to have been pretty bad. The Pond's Seedlings were worthless, and the condition, as a matter of fact of all the plums, was so bad and wasty that they were sold at considerable sacrifice, although it was quite evident that Messrs. Poupart's Liverpool office did all they could to save the situation. Luckily the pears arrived in good shape, so that the returns from the whole car-load were not so bad as to total, although if the plums had been brought over in good condition, the results might have been quite good."

SPRAY SERVICE

In co-operation with the Agricultural College and the county representatives instruction in spraying was carried on in every important fruit-growing county in the Province. The field men were supplied by the Fruit Branch with the assistance of two members of the O.A.C. staff, the whole being under the expert

supervision of the professors of entomology and botany at Guelph. The expenditure for this work was borne by the Fruit Branch.

The following counties had each a field man for the spraying season: Prince Edward, Northumberland, Durham, Norfolk, Lambton, Huron, Grey, Middlesex, Brant and Oxford, Halton and Peel, and the eastern counties on the St. Lawrence were each combined for the service and the Ridgetown Experimental Farm staff looked after the few large orchards in that section requiring assistance.

PROVINCIAL ENTOMOLOGIST

The work of the year may be classified under three headings—Administration, Extension, and Research.

Administration

I. *The Fruit Pest Act.* (*a*) *Nurseries.*—All nurseries, except one in St. Joseph Island which is known not to need inspection, have been inspected. The total number of plants examined was,—fruit trees of various kinds, approximately 1,200,000; ornamental trees and shrubs, including bush fruits, 1,080,000. Of all these plants, 650 were found infested with San José scale and destroyed.

(*b*) *Orchards.*—The usual inspection in spring for black knot and San José scale was carried out. San José scale is at present less numerous than at any time for over 30 years and is doing very little damage. Black knot is also scarce in the Niagara district.

In midsummer and fall, peach orchards were examined for Yellows and Little Peach. The total number of trees found affected and destroyed was 1,591. This is considerably higher than in 1927, but the increase was chiefly in the township of Niagara where the former inspector in 1926 and 1927 had failed to cover the district properly. A new and more energetic man was inspector this year.

Fumigation of nurseries.—By the new regulations all nursery stock has been exempted from fumigation except that destined for Nova Scotia. This stock has been treated as required.

II. *Spray Service.*—All the main apple districts of the Province except the Niagara district were under the service this year. Two training days were held at Guelph for all the local supervisors and agricultural representatives concerned. At this short course all sides of orchard work were discussed, so that the spray supervisors might be able to help the growers in other ways as well as spraying.

The season was remarkably favourable for the development of scab, yet in spite of this a large number of the men in the service had a high percentage of clean apples. There is no doubt that had it not been for the guidance of the supervisors we would have had one of the dirtiest crops of apples on record.

In Huron county the death in the midst of the spray season, of Mr. Wm. Grant, the local supervisor, hampered the work greatly.

III. Corn Borer Act.—In 1926 the Corn Borer Act was put in force in eight counties; in the fall of 1927 the number was more than doubled; and this fall all the territory west of Toronto except the counties of Grey, Bruce, Simcoe, Dufferin and the northern half of Wellington are under it. East of Toronto it includes York, Ontario, Durham, Northumberland, Prince Edward and the southern half of Hastings.

Of the twenty-four counties under the act this year, the clean-up in twenty was good and in the other four only moderate.

The results have been gratifying for there has been a decided reduction of the borers in all the heaviest infested counties, and in no county under the Act

was there any increase except in those where sweet corn was largely grown. It seems harder to combat the insect in sweet corn, especially Golden Bantam, than in any other variety, but there is almost no doubt that with a little extra care it can be done.

Extension.—This aspect of the work has been carried on in the following ways:—

(a) By timely letters in the press, by leaflets and the spray calendar.

(b) By public addresses at fruit meetings.

(c) By talks over the radio from London. Eight addresses were broadcasted in this way.

(d) By orchard meetings and visits to various parts of the Province where the presence of an entomologist was needed.

Research

I. *Spray Experiments.*—A series of experiments were conducted on twenty acres of apple trees about fifteen years of age to test new spray mixtures in comparison with those recommended in the spray calendar, and to test the merits of dusting with the latest dusts applied by an up-to-date dusting machine in comparison with liquid sprays. Valuable information for ourselves and also for the growers was obtained. Further experiments of a similar nature involving still more mixtures are being planned for the coming season.

II. *Oriental Peach Moth.*—Mr. G. G. Dustan continued his research studies at St. David's on this insect and obtained much further data. Fortunately weather conditions aided by parasites have reduced the insect this year by fully fifty per cent.

III. *The Corn Borer.*—Research on this pest is being continued, chiefly along the line of discovering the best available implements for crushing stubble and making it easier for the farmer to clean up his cornfields. This year we hope to be able to introduce low-cutting attachments for corn-binders and to devise an implement with knives or points which will run about two inches below the ground and lift out all corn stalks. This device would be used in Essex and Kent in spring if it works as we hope, would remove the necessity of ploughing; for the stalks after being lifted up could easily be gathered and burned. Cutting level with the ground and ploughing, we found by experiments this fall, will some years leave too many borers in the part beneath the soil to omit with safety, ploughing.

TOMATO INVESTIGATION

This year special investigational work on canning crops was requested by the growers in the eastern counties, particularly Prince Edward and Northumberland. A preliminary report on this work is submitted herewith covering the tomato.

Following several meetings to discuss tomato-growing problems last spring it was decided to conduct a series of experiments with tomatoes this season. Nine strains of John Baer, two of Marglobe, one each of Norfolk Canadian, Bonny Best and J.T.D., were grown side by side for a comparative test. Owing to poor soil, and a bad attack of blight, very few facts of any value were gained. Norfolk, like the Earliana, has not a vigorous enough foliage for a canning tomato. J.T.D., a strain used by the Campbell's Soup Co., was found to be too late for our use. A comparison of dusting and spraying with Bordeaux showed the sprayed plants to have more vigour and healthier foliage than dusted plants,

and the sticking quality of the liquid Bordeaux is far superior to dust. No check on the yields of any of these plots were taken as seasonal conditions brought on a severe attack of black rot in August which made records of yields practically worthless. Another experiment to find out if any increase was made in yields from plants grown sixty and eighty to a flat compared with those from one hundred to a flat was conducted, but nothing definite was found for the same reason.

Spraying was done from Port Hope, Brighton, Smithfield to Bayside and Wellington on the fields. The sprayed areas varied in size from one-half acre to five acres, and had from one to three applications. Orchard sprayers, horse-power potato sprayers and knapsack dusters and spraying outfits were used. Power sprayers at one hundred to one hundred and fifty pounds with a single nozzle or 200 to 300 pounds pressure, with two guns did effective work, but were very expensive, varying from $4.35 to $13.60 an acre, depending on the size of the plants, the distance from the water supply and the time involved in getting the tank filled.

The knapsack sprayer was a back-breaking job for a large field and was slow, although comparatively inexpensive. Dust cost considerably more than spray material although it was applied faster than with a knapsack sprayer, but it did not stick so well, particularly if it were windy. The two wheeled barrel spray which did four rows at a time seemed to be the most economical investment for field spraying. It cost sixty-seven cents to spray an acre and the rows were sprayed both ways. The amount of foliage covered was far from satisfactory, but with this type of an outfit it would be possible to spray every week or oftener from the time the plants were set until the plants filled the rows, and in that way keep the foliage covered. Professor MacLennan believes that a power pump barrel spray outfit would be very satisfactory.

Greenhouse practises were closely followed. In the spring most men use fresh soil. Very few treat their seed and practically none spray or dust. What spraying that is practised is done in a very indifferent manner. Blight was evident in Northumberland and Durham counties, in ninety-five per cent. of the greenhouses or frames, just before the plants were released to the growers. Many growers over-water their plants.

It is the belief of some that greenhouse men start their plants too early and plants receive a severe set-back when they are set out, either from being held back too long or from becoming too leggy and soft in the greenhouse. They do this particularly where large numbers are grown in order to spread out the work of transplanting. This is something that needs further investigation. Overcrowding in the greenhouse seems to be a common fault. Cotton sash is frequently used instead of glass, but it is not nearly so satisfactory, tending to throw soft leggy plants.

The dirt used by plant growers is not always the best. The sod used is often not sufficiently rotted and the dirt is frequently of a very heterogeneous nature which makes the plants uneven in the flats.

Some criticisms have been made of the plant growers that their soil is not rich enough. In cases this has been found to be true, but growers say that a soil too rich tends to throw very sappy leggy growth which won't stand up when set out, and by retarding too much the plants are given just as serious a set back. Even so, many growers use a small quantity of commercial fertilizer in their flats. These soil problems need a great deal of further study.

The common price for plants is $4.50 per thousand, but some districts pay less, and others as high as $5.00 and $5.50 for flats containing one hundred plants. Plants spaced further apart in the flats cost proportionately more,

usually forty-five cents a flat, irrespective of the number of plants it contains. It is doubtful if wider spacing in the flats gives an increased yield to cover the additional cost of the plants, but this is something that needs more investigation.

John Baer is used by ninety per cent. of the growers. Chalk's Jewel is popular around Port Hope. The remainder use Bonny Best, Worden, Landreth, and Marglobe.

Much more effective work can be done with the greenhouse men than with the farmers, as their activities are much more concentrated and one may grow plants for several hundred farmers.

When blight was discovered in the greenhouses and frames of the plant growers, as many plants as possible were treated with Bordeaux from a portable dusting outfit carried in the car, either at cost of the dust or free, depending on the number of flats to be treated. Several greenhouse men are going to buy dusters for next year as the result of this work.

Some successful growers follow an excellent rotation, following tomatoes after a clover sod, but others practice a very indifferent rotation. Fall ploughing shows up to good advantage, particularly on heavy soil, but it is not as common a practice as it should be.

Many farmers give their plants a severe set-back by planting before the ground is sufficiently warmed up or before the land is properly prepared.

Few men in Prince Edward County use commercial fertilizer, while a large percentage use it in Northumberland and Durham. Prince Edward men, however, seem to be more earnest in their efforts to grow good tomato patches and keep the weeds checked than the Northumberland and Durham men do, the latter men probably expecting too much from the fertilizer without giving enough care to cultivation.

Tomatoes are grown on all types of soil, from light sand to heavy clay, but seem to do best on heavy sandy loam or light clay loam. Blight is more severe on light sandy soils, while the maturity is retarded on heavy clay.

We co-operated closely with the Northumberland Tomato Growers' Association, and with the Canadian Canners. A field day on August 22nd was arranged, at which about thirty-five Northumberland tomato men visited some of the best tomato patches in Prince Edward County. Some time was spent with Mr. H. D. Clemenson, of the Canners Seed Co., Wellington, whose firm supplies much of the tomato seed used by the growers. Many erroneous ideas as to how the seed was saved were cleared away. On another occasion the president of the Association was taken to Wellington to visit the seed plots, as the fruit for seed purposes was being harvested. The various strains and varieties of tomatoes from all of the more important seed houses of Canada and United States were compared, as they grew side by side, with the varieties distributed by the Canners Seed Co. This is helping to bring about a much-needed understanding between the growers and the canner.

Seed selection operations at Wellington have been closely followed and several changes are being made which will tend to produce less off-type fruit than formerly. In the future all seed produced by the Canners Seed Co. will be disinfected. Mr. Clemenson, as well as most of the factory managers, is co-operating very closely with us.

The crop along the lake from Port Hope to Napanee has been very disappointing this season. The tomatoes have not yielded as high as were expected and the quality is poor. Seasonable conditions have caused cracked fruit, soft fruit with poorly coloured flesh, together with blight, black rot and a large percentage of yellow ends. Loss from leather end has been worse on light sandy

soil. According to Professor Howitt the chlorophyll is injured by too direct sunlight. Loss of foliage from blight and black rot brings about a variation in the normal ripening process of the fruit, causing the formation of a hard yellow rind and poorly coloured fruit. Climatic conditions have been very favourable this season for yellow ends. Marglobe seems to have a very vigorous foliage and is resistant to blight more than any varieties commonly used. Although it is later than John Baer it is in every other way a first-class canning tomato of good shape, well-coloured and very meaty. We believe there is a possibility for it or some of its hybrids on light land. Selection for Marglobe for earliness has met with some success at Wellington.

Many growers try to grow a greater acreage than they can properly handle and many patches now show the result of lack of cultivation in the early summer. Contrary to the average season, the well-cared for patch on light land has given better yields than those on heavier soils, but the abundance of rainfall this summer would cause this. Most patches on heavy low land have scarcely paid for the cost of the plants. Many patches were drowned out, and it is evident that men should give more care to the selection of suitable tomato land. There is need for more drainage in Northumberland and Durham counties.

Prince Edward County, due to climatic conditions, does not have to face the same conditions of disease that exist around Brighton. Most Prince Edward growers simply plant tomatoes on clover sod fall-ploughed and again ploughed in the spring after being dressed with manure. Few use fertilizer. The manager of the Canadian Cannery at Rednersville is very anxious that we run a fertilizer plot at Rednersville on heavy clay land, and promised to co-operate in every way possible. We plan to select land for this experiment next spring.

HORTICULTURAL EXPERIMENT STATION

The fruit-breeding work of the Horticultural Experiment Station has now developed to the point where it seems advisable to make a permanent record of the progress to date. Therefore the 1928 report will be confined mainly to this phase of the activities of the station, and more particularly to descriptions of the new varieties introduced and the extent to which they have been disseminated.

Extensive and systematic breeding work is being carried on with the following fruits,—strawberry, raspberry, apples, cherry (sweet), peach, pear and grape. Somewhat less extensive work is under way with other fruits, including the plum, currant, gooseberry, apricot, black raspberry, blackberry, etc. Definite projects having some particular improvement in mind for the fruit in question, are planned for each fruit. Some of the more important breeding projects may be briefly stated as follows: *Strawberry*, improvement in size and quality of early varieties; canning varieties equal to Portia, but of the perfect bloomed type. *Raspberry*, resistance to "mosaic" and virus diseases generally; increased hardiness, and improvement in vigour and strength of cane, size and firmness of berry. *Sweet Cherry*, earlier and later maturing varieties of the firm flesh type; resistance to brown rot. *Apple*, regularity of bearing, that is, annual in bearing habit rather than biennial; production of improved red winter varieties, better quality and increased hardiness being especially desired. *Peach*, improvement in appearance and in quality of the early season, yellow-flesh, free-stone varieties; extension of the season of peaches and of the Elberta type with earlier and later maturing varieties; cling-stone canning types suited to Ontario conditions. *Pear*, blight-resistance. *Grape*, production of varieties of the fruit-type of the Vinifera or Old World varieties, but possessing the freedom from disease and the climatic

adaptability of our present commercial sorts; improvement in varieties for wine-making purposes in respect to increase in sugar content and decrease in acidity, and in intensity of juice colour.

The extent of the breeding work on the above indicated, and other similar projects, is summarized in the accompanying table:

TABLE I.—SUMMARY OF FRUIT-BREEDING WORK, 1911-1927

Kind of Fruit	Year Breeding started	Total Number of Crosses or parentages to date—1927	Total plants set out	No. of selections to date	No. of introductions
Apple	1915	94 crosses 65 open	5,773	.....	.....
Cherry (1)	1915	22 crosses 27 open	2,027	16	1
Peach	1911	350 crosses and open	12,646	118	4
Pear	1913	98 crosses 39 open	4,522	9	.....
Plum (1)	1913	55 crosses 57 open	3,328	4	.....
Grape (2)	1913	499 crosses	55,786	55	.....
Strawberry (3)	1913	293 crosses	22,171	232	2
R. Raspberry (3)	1913	261 crosses	18,434	126	1
B. and Purple Raspberry	1914	11 crosses	800	.....	.....
Blackberry	1917	28 crosses	2,000	.....	.....
Current (red and black)	1915	21 crosses 20 open	2,240	.....	.....
Gooseberry	1915	47 crosses 38 open	3,971	21	.....
Miscellaneous (apricot, etc.)	.....	.....	.....	.....	.....

(1) In cherries and plums many crosses produced no viable seed, hence low number of seed in proportion to crosses made.
(2) Exclusive of 1926-27 breeding.
(3) Exclusive of 1927 breeding.

STATION INTRODUCTIONS

The introductions briefly described in Bulletin 343 are selections from the earlier breeding work of the station. In the judgment of the Experiment Station staff they represent distinct advances in their respective fruits. In fact, no seedling is saved, even for preliminary testing, unless it is thought to be *better* in some way than present commercial varieties of the same season. A very few seedlings survive all tests and are thought worthy of extended trial with the grower. These few are officially named and introduced. Some few other seedlings of promise are given limited distribution for trial. These, however, are not named, but are sent out under number, as for example, peach seedling No. 194055.

The fact of listing these new varieties under name in this report does not necessarily imply that they are recommended for extensive commercial planting. In fact, the Viking red raspberry is the only variety listed which is given such a recommendation. The other varieties are, however, of sufficient promise to warrant extensive and thorough test by the commercial grower. The extent to which certain varieties, such as the Vedette and Valiant peaches, have been planted, would seem to indicate unqualified recommendation of these varieties by this station. Such, however, is not the case. These heavy plantings simply indicate two things, the optimistic nature of the average fruit-grower, and the fact that these new varieties give promise of meeting a long felt want.

For complete list and description see Bulletin 343.

DAIRY BRANCH

The season of 1928 may be considered one of the most satisfactory since the war. The comparatively wet season was favourable for an abundant pasturage, and weather conditions were very favourable for the production of sweet milk and cream. The average price for cheese was about 21 cents per pound—2½ cents higher than in 1927; and the average price for butter about 37 cents—2 cents higher than in 1927.

The outstanding feature of the dairy industry in Ontario in 1928 was the organization of cheesemakers' associations or clubs in every instructor's group in eastern Ontario, and an association in western Ontario comprising all the cheesemakers west of Toronto. The organizations in eastern Ontario met together at different factories in each group every week or two weeks to discuss any problems that had arisen in their work. These meetings in many instances, were attended by the officers and patrons of the factories, and a spirit of goodwill and co-operation developed that has never been equalled in the history of the industry in this province. To these meetings can be attributed almost entirely the splendid improvement made in the quality of the cheese in 1928 as shown elsewhere in this report.

Instruction and Inspection at Cheese Factories

This work was carried on as in 1927. The Province being divided into thirty-five districts or groups. In each group there are from twenty to twenty-five factories with an instructor in charge.

In addition to instruction and inspection work the instructors tested the composite milk samples at 688 factories in 1927, and at 674 factories in 1928. The charge for testing is fifty cents per patron per year.

Certificates of qualification were issued under the Dairy Products Act and regulations to cheese and butter-makers for the first time in 1927. As was expected there has been a few complaints and criticisms, but the large majority of the makers and factory owners are well pleased with the scheme. It has given our best makers a standing and prominence which they never had before and has been an incentive to young makers to secure a first-class certificate, which is becoming a valuable asset in securing good positions in their chosen profession. To secure a first-class certificate a maker must be qualified to test milk and cream; keep his factory or creamery clean and sanitary; and make ninety-three per cent. of his butter in a first-class workmanlike manner, or ninety-three per cent. of his cheese first grade. The second-class certificates are issued to makers who make under ninety-three per cent. and over eighty-eight per cent. of their cheese first grade, or their butter in a first-class workmanlike manner. Makers scoring under eighty-eight per cent. may be granted a permit. Permits are also issued to young makers who are considered qualified to take charge of a cheese factory or creamery. No maker can be granted a permit for more than two years. The certificates and permits are issued annually.

The following tables show the number of plants, patrons, quantity and quality of the butter and cheese, and the certificates issued in 1927 and 1928:

Cheese Factories

	1928	1927
Northern Ontario	15	13
Eastern Ontario	655	671
Western Ontario	79	84
	749	768

PATRONS

	1928	1927
Northern Ontario	330	287
Eastern Ontario	22,182	22,503
Western Ontario	4,985	5,550
	27,497	28,340

	1928	1927
Value of improvements	$193,664	$207,729

The quantity of cheese manufactured in western Ontario from January 1st to November 30th, and in eastern Ontario and Northern Ontario from May 1st to October 31st, 1927-28 was as follows:

	1928	1927
	lbs.	lbs.
Eastern Ontario	75,153,096	80,006,475
Western Ontario	16,591,530	16,449,264
Northern Ontario	732,958	590,448
	92,477,584	97,046,187

Decrease—4,568,603 lbs.

QUANTITY AND QUALITY OF CHEESE BY PROVINCES AS SHOWN IN THE FEDERAL GRADERS' REPORTS 1927-28

	1928		1927	
	No. of Boxes	Per Cent. Sp. and 1st Grade	No. of Boxes	Per Cent. Sp. and 1st Cheese
Prince Edward Island	17,169	94.9	16,099	91.9
New Brunswick	253	9.1	164	.....
Quebec	506,533	85.9	413,061	74.1
Ontario	1,041,876	96.7	1,040,133	92.6
Manitoba	1,374	82.2	2,876	77.8

QUANTITY AND QUALITY OF ONTARIO CHEESE BY DISTRICTS AS SHOWN BY FEDERAL GRADERS' REPORTS

	1928		1927	
	No. of Boxes	Per Cent. Sp. and 1st Grade	No. of Boxes	Per Cent. Sp. and 1st Grade
Northern Ontario	7,618	94.88	6,282	93.2
Eastern Ontario	558,400	95.88	634,212	92.0
Central Ontario	300 913	97.65	231,351	93.7
Western Ontario	174,945	97.72	168,288	93.1
Totals	1,041,876		1,040,133	
Increase	1,743			
Average for the Province	.....	96.7	.....	92.6

QUALITY OF THE CHEESE IN THE DIFFERENT INSTRUCTORS' GROUPS—1928

1 group	99.3%	special	and	first	grade
6 groups	98% and under 99 %	"	"	"	"
12 groups	97% and under 98 %	"	"	"	"
3 groups	96% and under 97 %	"	"	"	"
6 groups	95% and under 96 %	"	"	"	"
4 groups	94% and under 95 %	"	"	"	"
2 groups	93% and under 94 %	"	"	"	"
1 group	under 93 %	"	"	"	"

Ninety-two makers made 100 per cent. first grade cheese in 1928.

QUALITY AND QUANTITY OF ONTARIO CHEESE BY COUNTIES

	1928		1927	
	No. of Boxes	Per Cent. Sp. and 1st Grade	No. of Boxes	Per Cent. Sp. and 1st Grade
Durham	210	100.	280	88.9
Prince Edward	35,029	99.3	38,765	92.2
Hastings	84,988	98.5	84,019	94.9
Northumberland	39,069	98.15	40,134	95.4
Peterborough	19,050	97.9	17,343	91.2
Addington	22,447	97.9	21,411	94.4
Stormont	44,813	97.6	47,874	94.4
Lanark	39,260	97.6	40,467	96.0
Renfrew	10,759	97.0	9,633	85.7
Carleton	56,854	96.6	59,498	94.1
Leeds	91,175	96.2	88,833	90.4
Glengarry	67,042	96.2	63,800	93.8
Frontenac	70,316	96.2	64,864	94.2
Russell	68,331	95.94	71,674	92.3
Lennox	26,342	95.9	26,474	91.6
Victoria	3,462	95.6	2,929	89.5
Dundas	63,094	95.2	71,441	87.2
Nipissing District	7,618	94.88	4,985	94.6
Prescott	89,931	94.61	91,799	92.1
Grenville	27,141	92.7	24,329	85.6
Average for Province	.....	96.7	.....	92.6

CHEESEMAKERS' CERTIFICATE

	1928			1927		
	1st Class	2nd Class	Permits	1st Class	2nd Class	Permits
Northern Ontario	5	4	7	4	2	5
Eastern Ontario	334	136	177	312	173	177
Western	41	19	18	47	13	20
	380	159	202—741	363	188	202—753

INSTRUCTION AND INSPECTION WORK AT CREAMERIES

In 1927 the staff of creamery instructors was increased from eight to eleven by changing three members of the staff from milk and cream testing work to instruction work and placing the check testing of cream in the hands of the instructors. To supervise the grading of cream properly two assistant instructors were employed during the busy season. Mr. G. H. Barker was appointed chief

instructor in Northern Ontario, with headquarters at North Bay. This appointment enabled the Dairy Branch to give much better service to the creamery men in that section of the province. In 1928 we unfortunately lost the services of Mr. C. O. Hand, who resigned to accept a position with the Toronto Creamery Company, and the work was rearranged with ten instructors and three assistants.

Grading cream and paying for it on a graded basis was made compulsory in 1926, and the following figures are taken from the Ontario Butter Grading Station records:

	Per Cent. 1st Grade	Increase
1925	61.11	.....
1926	71.72	10.61% (First Year)
1927	76.56	4.84%
1928	78.63	2.07%

About eighty-five per cent. of the creamery butter in the Province is manufactured from pasteurized cream. There is no doubt that the improvement in quality has increased the consumption of butter very much.

The creameries are located as follows:

	1928	1927
Toronto and West	168	165
East of Toronto	83	80
Northern Ontario	28	30
	279	275

CREAMERY PATRONS

	1928	1927
Northern Ontario	4,218	3,946
Southern Ontario	78,914	73,462

BUTTERMAKERS' CERTIFICATES

	1st Class	2nd Class	Permits	Total
1928	176	61	50	287
1928	181	49	70	300

QUALITY OF THE CREAM SEEN BY THE INSTRUCTORS

	Per Cent. Sp. Grade	Per Cent. 1st Grade	Per Cent. 2nd Grade	Per Cent. Off Grade
1928	3.8	76.5	19.1	.6
1927	5.5	73.6	19.5	1.4

BUTTER-GRADING STATION

CREAMERIES TAKING ADVANTAGE OF GRADING, AND CHURNINGS GRADED

	No. of Creameries	No. of Churnings
1928	139	24,031
1927	140	23,884

Quality of the Butter Graded

	Per Cent. Sp. Grade	Per Cent. 1st Grade	Per Cent. 2nd Grade	Per Cent. Off Grade
1928	2.03	76.60	21.17	.20
1927	3.03	73.53	22.92	.52

Ontario for the third time won the sweepstakes prize at the Royal Winter Fair for the highest scoring butter on exhibit, with a total score of 98.5. This was without any doubt the largest exhibit of butter ever made in Canada, and perhaps in America.

Cow Testing

The Dairy Branch tested the samples of milk as in 1927. Two men give their full time to testing in the counties of Norfolk, Haldimand, Brant, Wentworth, Waterloo, Perth, Halton, Peel, York, Ontario and Durham. A large percentage of the milk in these counties is produced for human consumption. The instructors at creameries and cheese factories tested any samples taken from herds in their various districts.

Eastern Dairy School, Kingston

The school is operated as a combined cheese factory and creamery from April 1st to December 31st each year. During January, February, and March, regular dairy courses are held. The attendance was as follows:

	1928	1927
Regular long course January 2nd—March 31st	41	38
Special course for cheese and butter-makers	60	105
Special course for instructors	30	30
	131	173

Standing of Students in Regular Long Course

	1st Class	2nd Class	Pass
1928	3	17	12
1927	2	20	7

Manufacturing Statement for the Fiscal Year November 1st—October 31st

	1927–1928	1926–1927
Butter manufactured	122,741 lbs.	169,815 lbs.
Pounds butter per 100 pounds fat	124.1 lbs.	124.7 lbs.
Average price paid patrons per pound fat	42.7c	42.7c
Cheese manufactured	80,911 lbs.	78,740 lbs.
Average price per pound cheese	21.7c	18.88c
Milk per pound cheese	11.23 lbs.	10.77 lbs.
Cheese per lb. fat	2.60 lbs.	2.68 lbs.
Price paid patrons per lb. fat	49.3c	42.64c

COLONIZATION AND IMMIGRATION BRANCH

The following figures give some idea of the work carried on by this branch during the past year:

Number of farm labourers placed	3,127	
Number of domestics who passed through the Canadian Women's Hostel, 72 Carlton Street	1,654	
(Of this number, new arrivals totalled)	1,387	
Salvation Army:		
Summary of Arrivals in the Province of Ontario.		
Domestics	317	
Youths	280	
Farmers	132	
Widows	17	
(Children accompanying)	17	
Unclassified	335	
		1,098
Vimy Ridge Farm, Guelph:		
Boys received	376	
(This makes a total of 1,013 since the inception of the Vimy Ridge scheme, May 1926.)		
Number of railway certificates issued to settlers proceeding to Northern Ontario (consisting of 461 adults—34 children)	378	
Number of enquiries received by mail re Northern Ontario	8,349	

The work has as usual been confined to those willing to go on the land as labourers or settlers, and those taking up domestic service. An effort has been made to meet the demands under these heads, but the number coming out from the Old Land is still short of the demand in this province. As indicated by the summary the plan for bringing out boys as farm apprentices has been continued, and 376 additional boys were placed during the year. This scheme is working out very well and there are many evidences that these boys are becoming good settlers

London Office

The Agent-General for Ontario in Great Britain continues to keep the Province prominently before the people of the British Isles. This is done in a great variety of ways and is of great benefit along business lines as well as along the lines of emigration. The greatest care is taken in the selection of persons who are sent out to this province and the office receives many letters which testify to the satisfaction of those who have been sent out. The following is a specimen letter from one of the girls who has come out for domestic employment:

"It is now nearly twelve months since I first corresponded with you with reference to coming to Canada, and I must assure you that I still feel deeply indebted to the Ontario Government for the assistance it afforded me at that time.

You will be pleased to learn that I am exceedingly happy in my now familiar and delightful surroundings, my only regret being that I never availed myself of this wonderful chance long before. As I feel that there are many would-be immigrants who only refrain from taking the step because they mistrust the 'glowing descriptions' held out to them of life in this country, I would like you to tell them (from one who has enjoyed eight months' experience of that life) that I have found nothing in the least exaggerated, and many things beyond my greatest expectations.

You are, therefore, at liberty to use my letter for purposes of advertisement, or in any way you wish.

Apart from any monetary gain (which is considerable, in comparison with wages paid in England), one develops personality and broader views than would be possible when remaining for ever in the same rut.

I shall always remember the jolly time on board, and still correspond with several of my 'shipmates,' who are equally pleased with their respective positions in various parts of Ontario and the Dominion."

Here is a letter from one of the boys:

"My darling Mum and Dad,—Thanks for all the letters received safely. The boots are safe in Galt, ready for me to fetch. I have to write you on Sundays every week, because that is the only day I get to myself. All other days it is up at 6 o'clock, breakfast, do the chores, then from 10 o'clock to 6 o'clock at night I cut corn or pitch sheaves, or clean out the stables; then at six is supper. Dinner is around about 12 o'clock. After supper, get the cows in, milk them, then get the calves in, feed pigs and get the ducks and geese in, and go to bed about 7.30 or 8 o'clock, and I can tell you I feel like it too!

How are things at home? I think of you an awful lot, and it makes me feel homesick, but I choke it down. I am out here to make good, not to be a wet rag doll. Do hurry and come out here. It's lovely. I am quite happy, and the work is not too hard. It was too great a chance to miss, and I am glad I came out here. On this farm we grow those winesap apples and russets, tomatoes and everything; fresh eggs, fresh cream and milk every day; and the most delicious apple tarts and rice pudding and things that you ever saw. All the cows are friendly. A lot of them are in calf this fall. I am looking forward to your next letter.

I hope Dad and you are happy and well. I am, and I am very brown already. My face, neck, chest and arms so much that you would think I was dirty, but I have changed my things this morning, and shaved, too. Well, I am waiting for the next letter. I hurry to the mail box each day to see if there is a letter; it cheers one so."

Apart from the attention devoted to agricultural interests the London Office has been able to bring the Ontario mining interests prominently before a large number of people interested in this subject.

The following statistical information shows to some extent the comparative use being made of the different branch offices:

County	No. of letters received	No. of letters written	No. of circulars mailed	No. of incoming 'phone calls	No. of visitors at office	No. of meetings held in office	No. of bulletins and reports distributed	No. of miles travelled by motor
Algoma	2,437	3,851	7,335	4,479	2,090	3	1,760	10,075
Brant	1,427	3,927	12,662	752	3,689	42	875	11,523
Bruce	2,400	2,000	17,500	1,700	1,500	22	2,500	30,200
Carleton	1,675	1,172	1,730	1,430	590	42	254	16,962
Cochrane	834	810	1,038	242	328	3	725	5,250
Dufferin	2,500	2,350	8,000	1,870	2,100	15	2,000	9,500
Dundas	1,930	1,642	6,800	1,540	1,450	98	600	12,000
Durham	1,716	2,418	8,182	848	1,230	42	1,127	16,924
Elgin	2,480	2,339	10,083	2,612	3,128	98	2,980	20,200
Essex	5,353	4,147	25,963	2,325	4,504	.....	2,000	21,000
Frontenac	1,910	1,181	3,618	1,928	1,023	98	893	12,538
Glengarry	1,273	1,003	8,110	1,384	754	10	223	13,231
Grenville	1,103	969	6,211	1,555	606	5	706	15,210
Grey	5,700	6,000	13,650	3,900	4,906	96	1,400	30,400
Haldimand	989	1,236	2,614	1,428	923	3	3,500	21,300
Halton	1,966	1,968	9,503	1,787	1,773	25	427	18,000
Hastings	2,500	2,472	8,950	2,040	1,800	106	3,200	24,000
Huron	2,351	1,478	11,740	1,484	1,564	16	1,850	28,300
Kenora	972	1,023	7,500	6,400	675	.....	274	6,800
Kent	3,300	3,700	24,050	2,800	2,900	26	3,050	13,585
Lambton	2,629	2,366	5,366	825	2,417	22	429	23,000
Lanark	2,272	1,070	5,546	590	1,006	37	500	17,176
Leeds	1,600	1,570	16,762	650	975	14	418	12,550
Lennox and Addington	2,014	1,810	3,985	1,448	1,633	44	850	8,020
Lincoln	2,634	1,843	10,293	1,117	1,198	42	1,636	21,373
Manitoulin	1,571	1,160	2,178	1,119	1,580	30	164	11,037
Middlesex	1,798	2,407	15,412	2,876	3,363	46	3,125	38,315
Muskoka and Parry Sound	2,981	2,438	10,500	1,125	1,500	9	575	12,500
Norfolk	2,381	2,032	24,501	1,831	3,533	61	1,793	12,559
Northumberland	2,650	2,478	9,020	2,328	2,192	24	725	16,400
Ontario	2,400	3,000	18,000	1,400	1,300	30	1,250	15,000
Oxford	3,285	3,887	24,712	1,906	3,584	24	972	16,905
Peel	3,200	3,530	6,673	8,300	5,891	21	3,538	16,500
Perth	1,615	2,000	10,410	1,080	1,050	45	300	6,850
Peterborough	1,600	1,400	5,000	1,000	1,500	40	2,000	16,000
Prescott and Russell	2,856	3,167	15,610	2,479	1,732	8	6,862	16,881
Prince Edward	1,250	1,310	3,000	2,500	2,100	34	1,100	13,000
Rainy River	1,414	1,229	7,013	2,914	2,419	23	1,353	9,935
Renfrew	1,845	1,360	5,993	483	905	19	14,656	14,500
Simcoe South	1,480	1,414	1,950	1,563	3,102	10	250	17,570
Simcoe North	2,076	1,980	7,500	1,056	1,276	22	3,800	15,000
Sudbury	1,700	1,350	3,500	1,052	989	.....	295	10,750
Temiskaming	2,336	2,000	7,383	3,020	1,700	2	800	13,365
Fort William	1,317	1,423	10,445	1,824	1,682	6	630	16,880
Port Arthur	643	794	8,416	767	732	2	1,848	12,342
Victoria	1,650	1,770	2,850	900	2,040	35	500	12,000
Waterloo	950	1,322	10,799	2,228	2,215	70	389	20,122
Welland	1,673	2,199	5,881	1,719	1,552	36	2,000	20,000
Wellington	2,159	2,127	9,674	336	1,124	21	7,030	17,039
Wentworth	2,654	2,960	14,560	2,865	5,406	31	8,000	25,000
York	3,430	4,157	4,822	1,561	2,618	35	1,225	25,000
Totals	107,979	109,239	482,993	97,366	101,847	1,593	99,357	840,567

That the services of the Agricultural Representative are in strong demand by individual farmers and also by the many organizations of his county is amply substantiated by the number of meetings attended and addressed during the year.

AGRICULTURAL REPRESENTATIVE BRANCH

The fiscal year 1927-28 proved no exception to those preceding it and the ever-increasing demand for the services of the Agricultural Representatives is an indication of the appreciation of the offices located in the fifty-one counties and districts of the Province. Any antagonistic feelings which may have existed in the early days towards departmental work have largely been cast aside and full support is being given by urban as well as rural individuals and organizations.

With the rapid growth of the work, it has been found impossible during the past year or two for the Director of this Branch to give the necessary supervision and assistance to the men in the field. In order to rectify this, a second assistant to the Director in the person of J. E. Whitelock, formerly Agricultural Representative in Peel County, was appointed early in the year.

During the year resignations were received from the following Agricultural Representatives: J. J. E. McCague, of Carleton County; Ray Atkin, of Hastings County, and D. A. Andrew, of Halton County. Transfers enacted were as follows:

A. P. MacVannel, from Prince Edward to Halton County.
F. J. Webster, from South Simcoe to Prince Edward County.

The following are the other appointments made in the fiscal year, 1927-28:

A. McGugan to Peel County.
W. M. Cockburn to Carleton County.
Joseph Wilson to Hastings County.
F. K. B. Stewart to South Simcoe.

The information as below, submitted by the Kent County Agricultural Representative, bears out this statement both from the standpoint of demand and also the number of organizations receiving assistance:

Date	Place	Nature of meeting	Subject	Attendance
Nov. 1	Chatham	County J.F.A.	Winter Programme	10
Nov. 2	Chatham	Ploughmen's Ass'n	Executive meeting	19
Nov. 3	Windsor	Chamber of Commerce	Barley Growing	12
Nov. 5	Chatham	Onion Growers	Co-operative Marketing	17
Nov. 12	Chatham	Vegetable Growers'	Executive meeting	9
Nov. 23	Merlin	J.F.A.	Short Course	17
Nov. 26	Chatham	Poultry Association	Annual Meeting	13
Dec. 1	Chatham	Advisory Council	Work Programme	6
Dec. 8	Blenheim	J.F.A.	Debate	30
Dec. 9	Chatham	County Council	Report	35
Dec. 10	Wallaceburg	Ont. Beet Growers	Annual Meeting	50
Dec. 12	Blenheim	J.F.A.	Debating Schedule	15
Dec. 14	Chatham	Vegetable Growers	Executive Meeting	14
Dec. 15	Dresden	J.F.A.	Debate	100
Dec. 17	Chatham	Agricultural Society	Annual Meeting	50
Jan. 9	Tilbury	Organization	Tobacco	12
Jan. 9	Merlin	J.F.A.	Judge—Debate	100
Jan. 12	Chatham	Organization	Kent Tobacco Growers	100
Jan. 14	Chatham	General	Tobacco Growers	3,000
Jan. 14	Chatham	Pen. Winter Fair	Executive	15
Jan. 16	Wallaceburg	Ont. Beet Growers	Organization	35
Jan. 16	Dresden	J.F.A.	Judge—Debate	75
Jan. 18	Chatham	Agricultural Society	Executive	15
Jan. 19	Chatham	Pen. Winter Fair	Executive	16
Jan. 21	Chatham	Agricultural Society	Executive	16
Jan. 24	Windsor	Organization	Tobacco	500
Jan. 26	Chatham	County Council	Report	40

Date	Place	Nature of meeting	Subject	Attendance
Jan. 27	Merlin	Short Course	Banquet	125
Jan. 30	Union Hall	Farmers	Poultry	30
Feb. 6	Wheatley	J.F.A.	Judging Course	23
Feb. 6	Blenheim	J.F.A.	Judge—Debate	45
Feb. 7	Chatham	Tobacco Growers	Executive	10
Feb. 11	Chatham	Ont. Corn Growers	Annual Meeting	15
Feb. 13	Morpeth	Short Course	Farm Mechanics	30
Feb. 13	Morpeth	J.F.A.	Debate	50
Feb. 17	Morpeth	Educational and Social	J.F.A. Opportunities	75
Feb. 18	Chatham	Teachers	Rural School Fairs	15
Feb. 20	Merlin	Educational	Sheep Clubs	35
Feb. 23	Chatham	University Grads	Alumni	50
Feb. 23	Merlin	Organization	Pig Club	50
Feb. 25	Chatham	Organization	Seed Campaign	6
Feb. 27	Pain Court	Organization	Tobacco Pool	75
Feb. 28	Eberts	Educational	Better Seed Campaign	30
Feb. 29	Wallaceburg	Educational	Better Seed Campaign	30
Mar. 1	Kent Centre	Educational	Better Seed Campaign	25
Mar. 1	Pain Court	Educational	Better Seed Campaign	50
Mar. 2	Blenheim	Educational	Better Seed Campaign	20
Mar. 2	Thamesville	Educational	Better Seed Campaign	12
Mar. 3	Dresden	Educational	Better Seed Campaign	25
Mar. 5	Coatsworth	Educational	Better Seed Campaign	30
Mar. 5	Valetta	Educational	Better Seed Campaign	40
Mar. 6	St. Andrew's Hall	Educational	Better Seed Campaign	60
Mar. 7	Kent Bridge	Educational	Better Seed Campaign	20
Mar. 7	Prairie Siding	Educational	Better Seed Campaign	65
Mar. 8	Rushton's	Educational	Better Seed Campaign	45
Mar. 9	Highgate	Educational	Better Seed Campaign	40
Mar. 9	Dewart	Educational	Better Seed Campaign	20
Mar. 10	Bothwell	Educational	Better Seed Campaign	20
Mar. 12	Chatham	Organization	Motor Tour	4
Mar. 17	Monroe	Educational	Sugar Beet Train	30
Mar. 19	London	Educational	Tobacco Commission	40
Mar. 21	Chatham	Pen. Winter Fair	Annual Meeting	30
Mar. 21	Chatham	Live Stock Ass'n	Annual Meeting	15
Mar. 23	Windsor	School Fair Trip	Annual Meeting	36
Mar. 28	Merlin	Organization	Sheep Club	16
Apr. 12	Guelph	Educational	Spray Conference	50
Apr. 19	Blenheim	Educational	Pruning and Grafting	30
May 7	Merlin	J.W.I.	Judging Comp	12
May 9	Chatham	Creamery men	Grading Cream	30
May 12	Chatham	Councillors	C.N.E. Exhibit	6
May 15	Guelph	Committee	Junior Extension	16
May 17	Blenheim	Drovers	Grading Hogs	22
May 24	Ridgetown	Women's Institute	Musical Festival	500
May 28	Chatham	Weed Inspectors	Weed Control	22
May 31	Chatham	J.F.A. and J.W.I.	Field Day	17
June 6	Chatham	County Council	C.N.E. Exhibit	35
June 11	Merlin	J.F.A.	Executive	12
June 12	Chatham	Ploughmen	Annual Meeting	17
July 5	Ridgetown	J.F.A. and J.W.I.	Field Day	300
July 9	Merlin	Ploughmen	Executive	16
July 10	Bothwell	Organization	Rural School Fairs	12
Aug. 6	Merlin	Ploughmen	Executive	17
Aug. 7	Bothwell	Organization	Rural School Fairs	13
Aug. 11	Chatham	Agricultural Society	Executive	14
Aug. 18	Chatham	Vegetable Growers	Executive	11
Aug. 21	Blenheim	Women's Institute	Home Beautification	30
Sept. 12	Chatham	Ploughmen	Executive	16
Oct. 1	Merlin	Ploughmen	Executive	12
Oct. 6	Chatham	Agricultural Society	Executive	14
Oct. 15	Merlin	Ploughmen	Executive	15
Oct. 22	Merlin	Ploughmen	Executive	21
Oct. 25	Merlin	Ploughmen	Banquet	175
Oct. 30	Merlin	Ploughmen	Executive	15

Total Number Meetings—94. Total Attendance—7,183. Average Attendance—76.

SENIOR WORK

Live Stock Improvement

The improvement of live stock has been retained as one of the major projects in the counties and districts of the Province. In view of market requirements and also of the fact that no improvement can be on a firm basis if the live stock be not healthy, educational work was carried on in many counties to eliminate tuberculosis in cattle and internal parasites in sheep and swine. The County Live Stock Improvement Associations, working with the Agricultural Representatives, have co-operated to the full with the Provincial Live Stock Branch and Federal Departments in carrying on this work.

That previous live stock work is bearing fruit is borne out by the comments of the Oxford County Agricultural Representative:

"The educational work in live stock carried on by this office with the public school boys in our judging competitions and the short course work in live stock with the senior boys, coupled with the educational work among the adults through the medium of the Live Stock Improvement Association, has completely changed public opinion in this county with regard to the live stock situation.

"Mr. Byron Jenvey, Oxford County Holstein fieldman, states that one of the outstanding features of his year's work was the number of unusually good pure-bred registered bulls that have been placed at the head of grade herds in the county. As an instance of this, he mentioned the case of an owner of a grade herd living six miles below (————) who came to him between Christmas and New Year's and asked him to go with him to purchase a bull. Before they had gone far, Mr. Jenvey inquired of the man what kind of bull he wanted to purchase and at what price so that he would know where to go. The man replied that he was not particular as to price, but wanted a good bull. They found one about three o'clock that afternoon that answered the purpose. On the return trip, Mr. Jenvey, knowing the kind of herd the man had, asked just why he had decided to purchase a bull of that type and the man answered that he had a boy on the stock judging team and he wanted to buy a bull that the boy could not pick any holes in. The man and boy arranged to get the bull that same night and about 11 o'clock that evening he called Mr. Jenvey up to tell him that a number of the boys of the neighbourhood were out in the barn holding a demonstration on the new bull.

"Mr. Jenvey states that although he has sold over $200,000 worth of cattle during the past two and one-half years, the cattle that are left are of higher quality than before these sales were made. This would indicate that the standard of our cattle is being considerably raised and it is safe to say that the three agencies already mentioned have played an important part."

Eradication of Tuberculosis

Farmers generally throughout the Province are taking increase dinterest in eliminating tuberculosis from their herds of cattle. Not only are individual breeders continuing in increased numbers to apply for accreditation, but in many areas progressive breeders and County Councils are staunch supporters of restricted areas. During the year in Eastern Ontario, in the counties of Leeds, Greenville, Dundas, Stormont, Glengarry, Prescott, Russell, Carleton and Lanark, educational campaigns have been conducted by the Agricultural Representatives in co-operation with the local people and the Ontario Live Stock Branch. Canvassing has been completed in most of the counties, and it is expected that the Health of Animals Branch will commence testing shortly.

Similar work has also been carried on by the Agricultural Representative in Kenora District and the people of the district have declared themselves in favour of the project.

Educational campaigns in favour of restricted areas have also been carried on in the counties of Haldimand, Lincoln, Welland, Wentworth, Oxford and Perth. Owing to local conditions, these campaigns have not been carried to

completion, but when certain adjustments in the regulations are made the general attitude of the cattle owners would indicate a big majority in favour of restricted areas.

The following statistics will indicate the method used in the campaign and the percentage of the cattle breeders in favour where canvassing has been completed:

County	No. of meetings	Attendance	Per cent. cattle owners in favour
Dundas	12	1,815	85
Glengarry	19	657	82
Grenville	19	860	77
*Lanark	40	1,017	.....
Leeds	11	665	81
Prescott and Russell	.....	.....	93
*Carleton	.....	.....	.....
Haldimand	4	725	36
Lincoln	22	810	75
Welland	17	915	59
Wentworth	24	1,875	.....
Oxford	15	2,147	.....
Perth	13	947	.....
Kenora	6	364	85
Totals	202	12,797	

*Canvassing in progress.

Cow Testing

This phase of work has been continued by the Agricultural Representatives in co-operation with the Dairy and Live Stock Branches of the Ontario Department of Agriculture. While there are fewer cows on test than formerly, the service has not only been worth-while, but appreciated by the farmers of the dairy districts participating. As a result of the information, many farmers have materially improved their herds. Interest has been stimulated and many men, after testing one or two years under this policy, have entered their herds under Record of Performance work; others applied for accreditation believing that a healthy herd is the first factor to ensure future success. The tendency towards the establishment of restricted areas prior to undertaking other improvement work has temporarily retarded the progress and development of cow testing.

The statistics submitted by the York County Agricultural Representative are of interest and indicate the value and benefit of this service to the dairy farmer:

Comparison of Returns from Nine Herds in the two Years of Testing

No. of cows		Average lbs. milk per cow		Increase per cow
1926	1927	1926	1927	
87	75	8,974	10,127	1,163 lbs.

Value of increase at $2.44 per 100	$28 37
	lbs. of milk
87 cows in 1926 produced	780,738
75 cows in 1927 produced	759,525
Difference	21,213

Twelve more cows were fed in 1926 to produce 21,213 pounds more milk—an average of 1,768 pounds per cow.

Comparison of Returns for High and Low Herd

	No. cows	Average lbs. milk	Average test	Pounds Butterfat
Best herd	7	13,083	3.3	402.8
Low herd	7	7,780	3.4	259.2
Difference		5,303		

Value of increase at $2.44 per 100—$129.39.

In 1926 the value of increase was $227.04.

So in 1927 the difference between high and low herd is much less, thus illustrating the improvement resulting from the previous year's information.

County	No. herds under test, 1928	No. cows under test, 1928
Algoma	18	208
Brant	20	228
Carleton	7	138
Dundas	2	...
Durham	10	113
Essex	6	....
Frontenac	3	61
Haldimand	3	25
Huron	1	18
Halton	4	57
Norfolk	44	241
Ontario	2	29
Peel	60	705
Perth	20	266
Peterborough	5	74
Simcoe North	5	38
Port Arthur	1	8
Waterloo	11	126
Wentworth	28	302
York	42	425
Totals	292	3,332

Control of Internal Parasites

This project has developed rapidly as a result of the appointment of Dr. L. Stevenson as Provincial Zoologist. Co-operating with Dr. Stevenson, the Agricultural Representatives have organized demonstrations in the treatment of both sheep and swine for the control of internal parasites. These have been very much appreciated by stockmen generally because in a great many cases the application of the treatment has meant profit instead of loss.

STATISTICS, PARASITES

County	Number demonstrations	Number in attendance	Animals treated in demonstration	Estimated total treated in county
Bruce	6	60	257	1,000
Cochrane	2	70	....	....
Dufferin	2	40	200	500
Durham	1	35	25	200
Grenville	2	15	30	500
Hastings	6	86	84	500
Huron	20	70	330	1,500
Lennox and Addington	4	68	250	400
Lincoln	2	25	....	200
Middlesex	5	40	100	1,000
Muskoka and Parry Sound	..	..	...	400
Norfolk	3	30	25	400
Northumberland	1	20	....	400
Perth	1	100	200	600
Rainy River	3	11	130	250
Renfrew	2	15	3	1,000
Victoria	3	87	27	400
Wellington	1	70	3	3,000
York	1	80	50	300
	65	922	1,714	12,550

The following extract from the report of the Lanark County Representative depicts some of the features of this work:

"This phase of work has been most gratifying and it is still further pleasing to observe the number of farmers who are profiting by the experience of others. It is a safe statement to make that over half the flocks of the county to-day are being treated at least once a season for both external and internal parasites. The work has been accomplished through demonstration work entirely.

"Two outstanding examples may be cited in the cases of Hendry Bros., near Carleton Place, whose flock was reclaimed from one not worth anything other than the value of their pelts, to a flock just as good as it had ever been. Tape and stomach worms were the chief causes of loss in this case. At Mr. Stuart Gunn's near Tetlock, lung worms were the chief cause of losses, and his flock has been reclaimed from practically a total wreck and built up to a fairly good flock. Many other cases might be cited, but these two are the most outstanding.

"In this connection too much credit cannot be given for the valuable assistance and advice rendered by Dr. L. Stevenson, who has been most willing to render any help possible and whenever possible. It has been greatly appreciated not only by this office but by our farmers as well."

Co-operating with the sheep promoters of the Dominion Live Stock Branch, the Agricultural Representatives continued to carry on other sheep extension work. Demonstrations in the various phases of sheep husbandry have been held at many points. Mention should be made of the special two-day marketing courses held in twenty-three counties of the Province. These have been particularly well received by the farmers and have played an important part in creating increased interest in the industry. The policy of installing dipping tanks and conducting demonstrations in dipping has been extended to communities not previously touched. The comments of the Grey County Agricultural Representative are of interest:

"The farmers in the county seem to have taken a greater interest in dipping this year than ever before. Many of the tanks have been used twice and tanks that were never used last year have been brought into service. The number of sheep dipped in each tank has varied all the way from 110 to approximately 750."

The general situation of this project is illustrated by the following statistics:

County	Tanks installed, 1928	Total tanks in county	Sheep dipped in demonstration	Estimate sheep dipped in county
Brant	2	7	.....	.....
Bruce	3	38	95	7,000
Carleton	3	15	460	1,700
Dufferin	1	20	.....	2,600
Dundas	1	3	.....	400
Durham	3	23	.....	2,300
Elgin	1	19	200	6,500
Essex	1	1	300	.....
Frontenac	1	12	.....	2,400
Glengarry	1	2	45	225
Grenville	3	11	.....	800
Grey	11	68	900	28,000
Haldimand	4	17	800	4,300
Hastings	3	6	1,500	2,000
Huron	4	19	1,036	2,500
Halton	..	5	.....	1,150
Kenora	1	1	23	175
Kent	3	12	300	3,000
Lanark	2	41	800	12,000
Leeds	1	6	.....	350
Lennox and Addington	..	21	.....	.....
Lincoln	1	6	2,052	2,500
Manitoulin	..	27	.....	1,600
Middlesex	5	40	360	2,000
Muskoka and Parry Sound	1	7	60	3,500
Norfolk	1	1	.....	.....
Ontario	2	24	.....	2,000
Oxford	..	11	.....	2,000
Peel	..	7	.....	.....
Perth	3	3	.....	.....
Peterborough	3	27	200	1,500
Prescott and Russell	..	7	445	.....
Prince Edward	1	1	125	300
Rainy River	2	16	.....	3,000
Renfrew	3	23	435	5,645
Simcoe South	2	15	.....	.....
Simcoe North	..	7	.....	2,500
Victoria	2	29	68	1,928
Waterloo	1	3	.....	.....
Welland	....	1	.....	200
Wellington	2	31	646	6,500
Wentworth	2	2	215	1,700
York	4	35	.....	2,500
Totals	84	670	11,065	116,773

In co-operation with the Provincial and Federal Live Stock Branches lamb fairs have been held in four counties. The value of these is emphasized in the following comments of the Lanark County Agricultural Representative:

"Lamb fairs have been a great boon to the sheep industry in this county, in fact, they have been the chief factor used in making ram club work effective. The marked improvement in the type of market lambs produced in the county can be traced almost directly to the lamb fairs. The degree of success met with can best be told by the Dominion Government reports from the stock yards. From these records it may be seen that Lanark County stands first amongst all the counties of the Province in the production of high quality market lambs, an honour greatly prized by our farmers."

Table of Statistics, Lamb Fairs

County	Place held	Number of animals entered	Number of lambs shipped to market	Grade of lambs
Lanark	Franktown	325	195	52% choice
Lanark	Middleville	400	266	60% "
Manitoulin	Little Current	212	212	62% firsts
Manitoulin	Manitowaning	251	251	55% "
Peterborough	Havelock	40	121	113 No. 1
Rainy River	Emo	336	273	253 "
Totals		1,564	1,318	

Swine

Despite the general dissatisfaction with the hog market educational work has been continued. In co-operation with the Federal Live Stock Branch special two-day swine marketing courses were held in twenty-four counties. The bacon hog club policy of the Provincial Live Stock Branch has been taken advantage of by the Agricultural Representatives and eighteen clubs organized during the year, making a total of 188 clubs in the Province.

Co-operating with both Provincial and Federal Live Stock Branches, bacon hog fairs were held in seven counties.

Bacon Hog Fairs

County	Place	Total entries	Total hogs exhibited	Total shipped to market
Durham	Orono	41	60	35
Grenville	Kemptville	40	85	58
Lanark	Almonte	50	130	97
Middlesex	Ilderton	79	200	138
Norfolk	Simcoe	64	125	86
Oxford	Woodstock	35	51	..
Peel	Caledon East	70	..	45
Total		379	651	459

Poultry

The poultry flock is no longer an insignificant side-line on the majority of our Ontario farms. The demonstrations in special short courses organized by the Agricultural Representatives, in co-operation with the Poultry Department, have played an important part in developing the industry. The eggs distributed for School Fair Work have been another important factor. In this regard the comment of the Agricultural Representative for Muskoka and Parry Sound is of interest:

"It is a common experience to hear breeders tell of the unusually good returns secured from pullets hatched from School Fair eggs. Quite frequently a few pullets obtained in this way have been the foundation for an improved flock of farm poultry."

During the past year special three-day poultry courses were held in seven counties. These were much appreciated and the demand is increasing.

Demonstrations and culling schools were again held in co-operation with the Poultry Department, O.A.C. The young men trained at these schools have assisted materially with the culling campaigns conducted throughout the Province. That this service is getting results is substantiated by the following comments of the Oxford County Agricultural Representative:

"The value of systematic culling in removing approximately one-third of the flocks as boarders each year saves a feed bill in the county of more than the annual amount spent by the County Council on the Oxford County roads."

Poultry Culling Statistics

County	Number of demonstrations	Number of birds culled in demonstration	Attendance	Estimated total birds culled in county
Algoma	7	635	155	....
Brant	....	....	....	9,073
Bruce	15	750	336	16,500
Carleton	6	555	109	3,500
Cochrane	7	....	300	....
Dufferin	2	400	....	2,000
Dundas	4	600	75	4,000
Durham	....	....	....	3,657
Elgin	9	960	148	6,000
Essex	....	....	....	60,000
Frontenac	15	2,044	164	3,000
Glengarry	6	1,352	97	5,000
Grenville	....	....	....	1,200
Grey	5	400	30	3,000
Haldimand	4	325	....	3,000
Hastings	6	400	150	700
Huron	2	500	20	50,000
Halton	....	....	....	10,000
Kenora	5	500	153	4,000
Kent	12	2,000	130	30,000
Lambton	9	720	189	3,500
Lanark	10	250	60	10,000
Leeds	5	395	148	2,500
Lennox and Addington	7	1,485	75	27,000
Lincoln	7	1,050	122	13,250
Manitoulin	....	....	....	2,230
Middlesex	15	2,500	275	21,300
Muskoka and Parry Sound	4	200	70	3,500
Norfolk	....	....	....	4,000
Northumberland	....	....	....	....
Oxford	....	....	....	17,167
Peel	....	....	....	10,000
Perth	3	....	....	....
Peterborough	4	300	92	20,000
Prescott and Russell	3	67	59	900
Prince Edward	5	600	65	2,000
Rainy River	15	1,165	84	2,100
Renfrew	13	1,094	237	5,000
Simcoe South	1	100	25	800
Simcoe North	10	....	800	7,000
Temiskaming	6	520	96	....
Fort William	16	550	65	650
Port Arthur	7	921	51	1,463
Victoria	11	1,205	199	4,000
Waterloo	8	800	140	4,000
Welland	5	200	92	4,000
Wellington	4	320	76	5,000
Wentworth	12	975	119	1,950
York	5	1,000	1,030	10,000
Totals	290	27,838	6,036	394,940

FIELD CROP IMPROVEMENT

Better Seed Campaign

This campaign, inaugurated by the Provincial Field Crop Improvement Committee, has achieved splendid results during the past year. Perhaps no project undertaken in the interests of agriculture has met with equal approval and support from the general farming public, the press and urban industry. Much remains to be done, but with interest stirred and information gained, future progress should move steadily onward.

In co-operation with the Provincial committee, the Agricultural Representatives assisted with the campaign by the following methods: distribution of posters and other literature, window displays, circular letters and articles in local press, meetings and demonstrations in halls, barns and field; local arrangements and publicity for the "Better Seed Train," collection of samples of seed grain and small seeds from seed drills of the Province.

The comments of the various Agricultural Representatives are indicative of the results and general feeling towards the project.

Representative, Grenville County:

"The Better Seed Campaign had a good effect over the county. There was an increased use of the two power mills located in the county. There was also an increased use in the home fanning mill."

Representative, Oxford County:

"The presence of the Better Seed Campaign in the county has been responsible for three seed-cleaning centres being established. Each of these plants had a busy season both in spring and fall.

Representative, Waterloo County:

"Five seed-cleaning centres have been established due to the influence exerted by this train."

Representative, Bruce County:

"The interest shown in the Better Seed Train and Better Seed Campaign was most marked. A central seed-cleaning plant was immediately established at Mildmay after the visit of the train, other sections planned to purchase central cleaning machinery at a later date and the importance of cleaner seed was generally recognized."

Representative, Ontario County:

"The fact that even a one-bushel per acre increase in yield on the one hundred and fifty thousand odd acres devoted to coarse grains in Ontario County would mean nearly one hundred thousand dollars extra farm revenue indicated possibilities in such a campaign that should hardly be ignored."

Representative, Perth County:

"Within a month of the visit of the train a large size Clipper machine which had been sitting in a back corner of a co-operative organization elevator was resurrected and placed in operation."

Representative, Kent County:

"This campaign was particularly applicable to Kent, a cash crop county and beneficial results have already been witnessed."

BETTER SEED CAMPAIGN

County	Number of meetings	Attendance	Number of demonstrations	Attendance
Algoma	5	122	..	....
Carleton	4	135	..	....
Cochrane	3	150	4	....
Dufferin	7	235	6	295
Dundas	9	1,000	3	75
Durham	5	100	2	40
Elgin	....	....	1	38
Essex	....	....	2	....
Glengarry	5	327	..	....
Grenville	5	230	..	....
Haldimand	6	65	..	....
Huron	1	50	3	100
Kenora	3	205	..	....
Kent	16	507	2	65
Lanark	4	....	..	....
Leeds	1	25	..	....
Lennox and Addington	5	269	1	35
Lincoln	7	235	..	....
Norfolk	12	335	..	....
Northumberland	6	175	6	175
Ontario	5	200	12	276
Peel	4	110	..	....
Perth	10	695	..	....
Peterborough	6	185	1	30
Renfrew	4	400	..	....
Simcoe North	2	85	..	....
Sudbury	8	251	3	58
Temiskaming	6	222	..	....
Fort William	3	160	..	....
Port Arthur	7	410	..	....
Victoria	6	237	1	56
Waterloo	5	200	..	....
Welland	10	730	1	60
Wentworth	7	510	..	....
York	4	400	1	80
Total	190	8,960	49	1,383

WEED CONTROL

In co-operation with the Provincial Weed Inspector, the Dominion Seed Branch and members of the staffs of the Ontario Agricultural College and the Agricultural School at Kemptville and Ridgetown, ninety-one meetings were organized by the Agricultural Representatives. That these resulted in progress is indicated by the following comments:

Agricultural Representative, Grey County:

"A greater amount of work was done in Weed Eradication this year than has ever been done before."

Agricultural Representative, Huron County:

"We have found most municipalities willing to attempt the clean-up of roadsides and waste-lands and a marked improvement in the situation was noted."

Agricultural Representative, Dufferin County:

"Inspectors took a keen interest in the meetings held to acquaint them with the provisions of the control act as well as various noxious weeds, their habit of growth and numerous control measures."

Agricultural Representative, Peterborough County:

"During the season we have had an exceptionally large number of weeds to identify and inquiries regarding the control of various bad weeds."

The Corn Borer Situation

The Agricultural Representatives, in co-operation with the county corn-borer inspectors, are carrying on educational campaigns for the control of this menace. Their campaigns are based on the control measures recommended by the Provincial Entomologist. The situation as indicated by the comments given below is greatly improved over the previous year and to a large extent can be attributed to careful clean-up measures.

Agricultural Representative, Kent County:

"The corn acreage almost doubled last year and the borer infestation was reduced thirty to forty per cent."

Agricultural Representative, Essex County:

"The situation in this regard has shown a great deal of improvement over 1927. The corn acreage has doubled over 1927 and we also have the best corn crop since the borer arrived. Yields of 100 baskets per acre are quite common with two reported of 120 baskets per acre and one man reports a yield of 140 baskets. The enforcement of the Act is in the hands of Mr. J. H. Hedrick, and our office lends support in the preparing of reports and distribution of literature and information. Our office is also a clearing house for those seeking and giving information for the better observance of the Corn Borer Act."

Seed Drill Survey

The Provincial and Federal Departments of Agriculture in co-operation conducted a survey of the seed being sown in the spring of 1928. Altogether, 1,898 samples of cereals and small seeds were collected. Practically all of these were gathered by the Agricultural Representatives from the seed drills of the Province. The analyses of these samples were made by the Dominion Seed Branch and to the officials of this Branch is due much of the credit for the completion of the project.

Of the 1,898 samples collected thirty-two per cent. on analysis were rejected on account of weed seed content and an additional four per cent. were rejected on account of low germination. The remainder were divided among the three grades, viz., 1, 2 and 3, with slightly more in grade 3 than in either grades 1 or 2.

That the situation is serious is more clearly evident when we realize that, by sowing even a No. 3 grade of oats at the rate of two and one-half bushels per acre, a farmer might be polluting his fields at the rate of 8,500 weed seeds per acre, one-fifth of this number being noxious. With the small seeds, such as alfalfa or red clover, sown at the rate of fifteen pounds per acre, a number three grade under the Canada Seeds Act permits the sowing of 120,000 weed seeds per acre and of this number 6,000 are primary noxious.

A large number of samples were found to contain weed seeds detrimental to the successful and profitable production of crops. The following statistics show the approximate percentages of samples in regard to content of certain weeds:

Wild Oats	26%	Perennial Sow Thistle	8%
Night-flowering Catchfly	22%	Bladder Campion	7%
Couchgrass	21%	False Flax	5%
Canada Thistle	17%	Ox-Eye Daisy	3%
Wild Mustard	13%		

The analyses show an astonishingly large number of the cereals to contain weed seeds which should have been removed with the ordinary operation of a reasonably well-equipped fanning mill. Evidence of this is illustrated by the following table taken from the report of the Dominion Seed Branch for Western Ontario:

Number and Percentage Containing

Kind	Number samples taken	Primary noxious weed seeds		Noxious weed seeds		Wild mustard	Bladder campion	Night-flowering catchfly
Oats	224	32	14%	152	68%	15	10	17
Barley	78	10	13%	48	61%	6	1	6
Mixed Grain	481	82	17%	356	74%	34	32	76
Small Seed	284	50	18%	268	94%	15	15	166
Pea	3	..	..	..	..	...	...	...
Flax	1	..	..	1	100%	...	...	...
Wheat	7	2	28%	5	71%	1	...	1
Buckwheat	1	..	..	1	100%	...	...	...
	1,079	176	16%	831	77%	71 (6%)	102 (9%)	266 (25%)

The information obtained by the Agricultural Representatives would also indicate that well over half of the samples were home-grown. This fact would lead to the conclusion that, in order to ensure the sowing of good seed, further educational work to improve the quality of home-grown seed is at least equally as important as the enforcement of the Canada Seed Act.

Each Agricultural Representative received a report from the Dominion Seed Branch with regard to all samples submitted from his respective county. On receipt of this information the Agricultural Representatives forwarded to individual farmers from whose drills samples of seed were secured the grade of their particular lot, and also general statements on the samples collected in their respective counties. The information secured will be further used in the Better Seed Campaign to be continued in 1929.

Spray Service

The spray or orchard service was again extended to the fruit growers in nineteen counties. This continued to be a joint effort on the part of the fruit growers' associations, the Fruit Branch, Vineland Experimental Station, the Entomological, Botanical and Horticultural Departments of the Ontario Agricultural College and the Agricultural Representatives. The Agricultural Representatives were responsible for the service in their respective counties and were assisted by a practical orchardist called a Spray Supervisor, who carried on the field work. Demonstrations in various orchard practices were held in the spring, and this was followed up with timely service letters and visits to the orchards. In a year such as 1928 when atmospheric conditions were most conducive to apple scab, the value of the spray service was brought home in no uncertain manner to the growers of the Province. The comments of the fruit growers on the service are of interest:

Grower, Oxford County:

"In the orchards where the owners followed the instructions of the supervisor, the pack turned out about 90 per cent. clean. In orchards where they did not follow his advice, the returns were about 90 per cent. domestic."

Grower, Brant County:

"The spray service is a splendid thing and we surely value all your kindness and information."
"Everything o.k. Supervisor always on the job at right time."
"Spray service was satisfactory and appreciated."

Agricultural Representative, Prince Edward County:

"The production in the County of Prince Edward this year was approximately 42,415 barrels with a net return to the growers of $112,000."

"Due to the work of the apple maggot and to apple scab the unsprayed fruit was practically worthless this year. In the majority of cases the growers received $6.00 per barrel for No. 1 Northern Spys, McIntosh Reds and Snows. These prices are higher than ever obtained before. Apple buyers in this county claim that the spray service is of unlimited value to the fruit grower."

The achievement tables submitted below give some indication of the value of the spray service in a year such as 1928:

Apples Harvested

County	Per cent. No. 1	Per cent. No. 2	Per cent. No. 3	Per cent. clean fruit
Durham	60	25	15	..
Huron	45	25	30	70
Brant	60	20	20	90
Leeds	..	..	..	85
Prince Edward	50	30	20	..
Hastings	50	30	20	50
Grenville	65	20	15	95

(This information is not available for the remainder of the counties in the spray service.)

From the Annual Report of the Agricultural Representative from Huron County we submit an orchard report from fourteen growers. The wide degree of variance in the percentage of clean fruit produced by the different growers will be noted. This is a general guide as to the extent to which the spray supervisors' recommendations were followed:

Orchard Identification	Apples Harvested (barrels)			Per cent. clean fruit
	No. 1	No. 2	No. 3	
1	200	70	70	95
2	40	35	45	50
3	75	30	45	80
4	60	35	35	55
5	100	110	125	45
6	46	40	29	80
7	5	25	..	85
8	5	10	35	50
9	30	40	50	50
10	30	40	30	50
11	390	100	85	70
12	75	45	30	85
13	75	75	100	85
14	67	..	110	30
Total	1,198	655	789—2,642	

STATISTICS—SPRAY SERVICE

County	Number of men receiving service	Number of service letters mailed	Average number of visits to each orchard
Brant	28	6	4
Dundas	32	8	2
Durham	80	14	3
Grenville	82	6	2
Grey	27	3	3
Hastings	15	8	2
Huron	31	7	4
Halton	43	4	4
Lambton	66	6	5
Leeds	18	5	2
Middlesex	53	5	7
Norfolk	320	9	2
Northumberland	80	12	7
Ontario	9	7	4
Oxford	54	9	6
Peel	20	13	3
Prince Edward	162	5	6
Wentworth	29	10	5
Total	1,149		

EXPERIMENTAL AND DEMONSTRATION WORK

The Agricultural Representatives, in co-operation with other departments and organizations, have, during the past year, carried on among the farmers of their counties numerous demonstrations and experiments in fertilizers; varieties tests of grains, vegetables, small fruits and in control of insect and fungus diseases.

DRAINAGE

The demand for this service has been particularly heavy as a result of the excessive rainfall during the past year. In some sections of Eastern Ontario adequate drainage is one of their biggest problems. In such counties where all soil and crop improvement hinges on this problem, our Agricultural Representatives are undertaking this project as one of their major activities.

Except in cases where a detailed plan of drainage is requested by the farmer, the work is undertaken by the Agricultural Representative who drafts the necessary profile. The larger projects are referred to the Departments of Drainage at the Ontario Agricultural College and Kemptville Agricultural School, who supply the necessary extension men.

FARM LABOUR

In most counties the office of the Agricultural Representative serves as a farm labour bureau. Applications for assistance are received and forwarded to the Department of Colonization and other organizations. Despite the difficulty in

securing sufficient satisfactory farm help at certain seasons of the year, it is a service much appreciated by the farmers.

Advisory Agricultural Councils

The Advisory Agricultural Councils appointed by the County Councils in many counties have rendered valuable assistance to the Agricultural Representatives. Their knowledge of local conditions is invaluable when planning any project. In addition to this, they assist in innumerable ways to carry to a successful completion the many projects of a county agricultural programme.

In regard to the value of these Committees the following comments are of interest:

Representative, Waterloo County:

"The Advisory Agricultural Council throughout the year have rendered valuable assistance to this office. Through their efforts a bull census was taken in the county, our Better Seed Campaign was advanced and our School Fairs and Agricultural Societies' Fairs have received valuable assistance. In connection with our Weed Control Campaign, they assisted the inspectors and considerable of the credit for the popularity of the Corn Borer Act in the county is due to their support. They also assisted this office with our courses in Agriculture; with our Heifer Clubs, in fact, they have given very valuable assistance in every line of work."

Farmers' Educational Tours

In many counties the Agricultural Representatives are finding motor tours for parties of farmers of increasing value. These tours varied in length from one to five days and included visits to points of general and agricultural interest. They serve as a means of making new contacts; securing new ideas and obtaining new inspiration with which to attack their problems on their return home.

County Exhibits at the Canadian National Exhibition

In 1928 the counties of Simcoe, Durham and Northumberland, Halton, Peel, Kent, Essex, Ontario and York, Wentworth, Brant, Dufferin, Lambton, Norfolk, Grey, Hastings availed themselves of the opportunity to place displays in the Ontario Government Building at the Canadian National Exhibition. In addition, there were two exhibits from Northern Ontario; one representing northwestern Ontario and the other the districts east of and including Algoma.

The Agricultural Representatives, co-operating with local committees and County Councils, planned and prepared their respective exhibits.

In most cases one or two special crops or branches of agriculture were stressed. Innumerable contacts were formed, the advertising value of which cannot be measured in dollars.

Another resulting factor which cannot be overlooked is brought out in the following comment of the Agricultural Representative for Muskoka and Parry Sound:

"An exhibit such as this seems to stir up a feeling of pride in our local people, due to the knowledge that they are represented by something equally as attractive and interesting as those representing other parts of the province."

JUNIOR DEVELOPMENT

Rural School Fairs

The popularity of this feature of junior extension continues to increase with the years. New educational features are generally added to the programme yearly and these not only retain but increase the interest of the boys and girls, teachers, trustees and parents. Under such features are included inter-school competitions in physical exercises, singing, team competitions in first-aid, live-stock judging, domestic science judging, vegetable and fruit judging, poultry judging, individual competitions in weed naming, stock naming and public speaking. Friendly rivalry and increased interest can only result from such competitions.

The success of school fair work depends not only on the encouragement received by the boys and girls from their parents, but also to a large extent on the interest taken by the teachers and public school inspectors of the province. To the Department of Education, therefore, belongs no small part of the credit for the success that has been attained.

The T. Eaton Co., Limited, again donated a silver trophy to champion pupils of each of the 568 school fairs held in the Province. In addition, suitable book prizes were donated by the same firm to the second and third high pupils at each fair. These special prizes no doubt contributed no small part to the increased interest of the past year.

In 1928 the Ontario Department of Agriculture, through the Agricultural Representatives, distributed to the boys and girls of the Province for school fair purposes the following quantities of seeds, eggs and baby chicks:

POTATOES

	bags
Irish cobblers	842
Green Mountains	296
Dooleys	649
Total	1,787

Distributed in five-pound bags to 30,888 pupils.

Oats

	bush.
O.A.C. No. 144	108
O.A.C. No. 3	15
Banner	48½
Alaska	23½
Total	195

Distributed in three-quarter-pound lots to 8,840 pupils.

Barley

O.A.C. No. 21 ..... 133¾ bus

Distributed in one-pound lots to 8,193 pupils.

Wheat

	bush.
Marquis	76¼
Goose	16
Kubanka	2
	94¼

Distributed in one-pound lots to 5,655 pupils.
Number of pupils receiving registered grain, 22,688 pupils.
Number of pupils receiving registered or certified grain or potatoes, 53,576.

The total distribution of supplies was made up of the following:

	lots
Potatoes, grain	53,576
Beets, carrots, onions, parsnips	63,700
Mangels, turnips	19,100
Corn, field and sweet	24,100
Flowers	72,100
Field peas	320

	Baby chicks	Number dozen eggs
Barred Plymouth Rocks	9,520	11,138
White Wyandottes	492	300
White Leghorns	1,402	797
Total	11,414	12,235

The growth during the year is depicted in the statistics given below. It is interesting to note the increased number of entries despite the most unfavourable weather conditions existing in September when school fairs were being held:

	1928
Number of School Fairs	560
Number of Schools	4,859
Number of Pupils	135,153
Number of Home Plots including flowers	162,199
Number of entries	317,371
Number of children attending fairs	158,841
Number of adults	204,046
Total attendance	362,887
Number of championship fairs	25

Championship School Fairs

In nineteen counties championship fairs were held. At these events the first and second prize-winning exhibits and competitors are brought together and county champions declared. While these events are not to be recommended in all counties, under certain conditions they are serving a useful purpose and stimulating increased interest.

The following extracts from the reports of our Agricultural Representatives are of interest:

Championship Fair, Grey County

Estimated number in attendance	4,000
Receipts of Agricultural Society	$547 00
Amount of prize money paid	333 00
Number of schools in parade (rural)	20
Number of schools in parade (urban)	2
Number of competitors (Boys' Public Speaking Contest)	18
Number of competitors (Girls' Public Speaking Contest)	19
Number of competitors (McPhail Public Speaking Contest)	15
Number of solos (Boys)	18
Number of solos (Girls)	17

Agricultural Representative, Rainy River district:

"The district championship in public speaking and singing were two of the most interesting parts of the school fair work. Since every school fair association is eligible to make an entry in each competition, the interest is district wide. Handsome trophies awarded to the winners, depicts the attitude of public-spirited persons. A crowded hall, listening to a programme given entirely by children, gives expression of public opinion for those engaged in the School Fair Project."

Junior Seed Competition at the Ottawa Winter Fair

The Junior Seed Competition, conducted at the Ottawa Winter Fair, resulted in Temiskaming District winning the Senator Hayden Challenge Trophy. This competition is open to the boys and girls of Eastern and Northern Ontario and Western Quebec, who have won first prizes at local school fairs held in 1928. This competition creates a good deal of interest in the territory referred to above and the boys and girls of Temiskaming District achieved no small honour in winning the Senatory Hayden Trophy emblematic of the Championship.

Poultry Breeding Stations

These flocks, selected by the Agricultural Representatives, continued to be sources of supply for eggs and baby chicks distributed for school fair purposes. They are recognized in their communities and counties as reliable centres from which to secure stock for the improvement of the farm flocks.

Cockerels supplied yearly by the Poultry Department, O.A.C., together with yearly inspections by extension men from the same department have played an important part in developing the general high standard.

The effect of these flocks in raising the general quality and productiveness of Ontario poultry is borne out by the comments of the Agricultural Representative for Lennox and Addington:

"The Poultry Breeding Stations have exerted a wonderful influence on the improvement of poultry in this county. Cockerels raised by public school pupils have been used for flock improvement in every district. The stations have found ready sale for all hatching eggs not required for distribution through schools. One man told me the other day that he bought twenty pullets from a breeding station about one year and a half ago, and in twelve months they laid an average of 238 eggs."

STATISTICS, POULTRY BREEDING STATIONS

County	No. of stations	No. of hens and pullets	No. of cockerels	No. of dozen eggs for school fairs	No. of chicks for school fairs	No. of dozen eggs sold to farmers	No. of cockerels sold to farmers
						700 chicks	
Algoma	7	760	31	412	....	470	9
Brant	2	400	8	93	1,031	352	....
Bruce	6	729	31	425	....	264 chicks	67
Carleton	6	666	25	286	....	224	41
Dufferin	1	100	5	48	....	25	15
Dundas	3	410	21	163	....	225	28
Durham	5	690	31	210	....	368	7
Elgin	7	920	35	588	....	410	76
Essex	2	375	15	184	219	150	25
Frontenac	5	683	69	236	....	336	39
Glengarry	1	145	5	246	....	76	2
Grenville	4	480	20	96	....	290	35
Grey	9	750	33	373	....	....	....
Haldimand	1	230	12	138	296	30	45
Hastings	2	350	....	83	....	250	....
Huron	2	340	13	288	....	350	....
Halton	4	650	16	136	....	....	....
Kenora	5	350	12	192	....	78	16
Kent	3	905	29	444	....	459	7
Lambton	6	869	27	383	....	800	92
Lanark	4	325	14	251	....	....	....
Leeds	7	1,197	58	224	142	405	41
Lennox and Addington	1	140	8	107	....	60	30
Lincoln	5	295	13	202	....	235	6
Manitoulin	8	608	28	273	192	370 chicks	63
Middlesex	7	1,110	62	627	202	801	109
Muskoka and Parry Sound	8	489	23	261	....	....	....
Norfolk	2	550	6	159	62	....	....
Northumberland	....	....	....	....	....	....	....
Ontario	3	997	....	190	....	325	....
Oxford	33	5,583	305	215	....	....	....
Peel	4	455	22	....	3,420	409	42
Perth	1	150	10	59	68	200	15
Peterborough	2	165	12	140	....	40	11
Prescott and Russell	4	407	7	89	....	174	37
Prince Edward	3	975	41	212	....	....	....
Rainy River	10	579	24	480	....	188	27
Renfrew	6	320	19	264	....	210	39
Simcoe South	4	500	31	245	....	172	24
Simcoe North	3	608	46	254	360	216	....
						2200 chicks	12
Sudbury	3	205	11	200	....	....	....
Temiskaming	2	172	9	138	....	....	2
Fort William	2	175	10	111	....	90	....
Port Arthur	2	83	6	70	....	44	28
Victoria	5	390	22	289	....	76	41
						2790 chicks	
Waterloo	3	950	27	....	2,351	60	....
Welland	4	607	19	225	....	....	....
Wellington	2	525	17	173	....	210	203
Wentworth	1	105	4	60	....	....	....
York	4	525	17	378	....	135	....
						9654 chicks	
Totals	224	29,992	1,310	10,920	8,343	8,943	1,234

Boys' and Girls' Clubs

While this phase of work is more or less in its infancy the results to date have been most noteworthy. To be successful, this type of work necessitates close supervision on the part of the Agricultural Representatives and those sponsoring the project. The service clubs such as the Kiwanis and Rotary have taken a good deal of interest in the Boys' and Girls' Club work, and to them as well as other organizations, the Federal and Provincial live stock branches is due a good deal of credit for their success.

In practically all communities where this work has been undertaken it has resulted in increased interest among the boys and girls and also stimulated the interest of the adults in growing better crops and the improvement of the farm live stock. In this regard the following comments are of interest:

Agricultural Representative, Waterloo County:

"On March 30, 1927, we organized the Wilmot Township Boys' and Girls' Jersey Heifer Club. Thirty-five heifers were bought by the members of this club. The average age of the boys and girls was seventeen. This Club has developed very satisfactorily and has created a great deal of interest in not only good Jerseys, but good live stock throughout Waterloo County. Seeing the advertisement that this club gave the Jersey men, the breeders of other breeds of cattle have become interested and are doing more to promote the advancement of their particular breeds than they were doing previous to the organization of this Club. This Club was instrumental in starting a number of new herds of pure-bred Jersey cattle where poor cattle had been kept before its organization. It has also created a good deal more interest in the home herds of all the boys and girls that are taking part. The boys and girls have become acquainted with better feeding methods, R.O.P. testing and the general care of their animals. The first show for this club was held at the New Hamburg Fall Fair in the fall of 1927. Thirty-three of the thirty-five heifers that were originally placed with the boys and girls competed. There was also a large number of calves on exhibition. This year the show was one of the big attractions at the New Hamburg Fall Fair."

Agricultural Representative, Ontario County:

"During the summer two field meetings were held for the 125 boys comprising the club. Mr. John Tucker took great pains at each meeting to take the boys through the plots and explain the different potato diseases. Another phase of the project was the record on yield, financial statements and fertilizer results.

"Of the seventy-five records returned to this office, the average yield, taking it for granted that the average size of plot was one-eighth acre, was fifteen bags or one hundred and twenty bags to the acre. The yield of the ten highest was 181.6 bags per acre and the highest individual yield was two hundred and seventeen bags per acre.

"Another feature of the project was a Boys' Potato Fair held in Uxbridge, October 30th. Ninety-eight boys exhibited ninety-eight bushels of Dooleys, as well as making entries in other classes of both Dooleys and Cobblers. Twelve boys made speeches on 'The Potato Situation in Ontario.' Forty-five boys judged four classes of potatoes in a judging competition.

"A boys' exhibit, eighteen feet by twelve feet, was arranged at the Royal Winter Fair which conveyed a message to both growers and consumers. Much favourable comment was heard regarding this exhibit. After the fair the ninety-eight bushels of Dooleys, which had been used in the exhibit, were sold to the T. Eaton Co., Limited, for one dollar per bushel, when potatoes were selling in Uxbridge at 45 cents per bag. The sale of these potatoes at this price helped considerably to drive home the lesson 'that people will pay well for a choice article.'

"On Nov. 21st, ninety-five of the boys comprising the club were taken to Toronto in three large buses and were there entertained to dinner at the King Edward Hotel by the Kiwanis Clubs. Following this they were presented with tickets to the Royal Winter Fair, by Mr. A. P. Westervelt, Manager of the "big show."

Statistics, Boys' and Girls' Clubs

County	Name of Club	Membership
Carleton	Garden Canning	13
Essex	Soy Bean Club	37
	Dent Corn Club	85
Grey	Sheep Club	59
Haldimand	Cayuga Sheep Club	10
	Dunnville Sheep Club	15
Huron	Maitland Boys' and Girls' Sheep Club	15
	Ashfield Boys' and Girls' Sheep Club	12
Halton	Boys' and Girls' Calf Club	13
Kenora	Boys' and Girls' Potato Club	17
Kent	Kent Corn Club	130
Lennox and Addington	Boys' Poultry Club (Rotary)	34
Middlesex	Komoka	7
	Delaware	14
	Sylvan	19
	Appin	9
	Thorndale	11
Ontario	Kiwanis Farm Boys' Potato Club	125
Peterborough	Warsaw Boys' Sheep Club	10
Peterborough	Indian River Sheep Club	11
	Peterborough Ayrshire Club	10
Prince Edward	Kiwanis Boys' Potato Club	45
Renfrew	Douglas Sheep Club	12
	Eganville Sheep Club	12
Simcoe North	Oro Station Sheep Club	11
	Phelpston Sheep Club	9
	Carley Sheep Club	10
	Barrie Junior Fair	28
Sudbury	Board of Trade Farm Boys' Potato Club	50
Fort William	Fort William Young Men's Board of Trade Potato	27
	Slate River Valley Holstein Heifer Club	16
Port Arthur	Dorian Pig Club	10
Waterloo	Wilmot Jersey Heifer Club	35
	Galt District Boys' and Girls' Holstein Heifer Club	16
Wellington	Minto Boys' and Girls' Sheep Club	11
	Mayboro Boys' and Girls' Sheep Club	12
	Totals 36 clubs.	960

Home Garden Contests

The Home Garden Contests are conducted chiefly with boys and girls between the ages of twelve and seventeen. Eighteen varieties of seed are distributed to each contestant at a nominal cost of fifty cents. Definite plans for laying out their respective gardens together with suggestions as to cultural methods are also supplied. The gardens are scored in midsummer by the Agricultural Representatives who make suggestions for improvement and award the prizes.

These contests have not only resulted in gaining the interest of the contestants in better gardens, but also have been the means of introducing many previously unfamiliar varieties of vegetable to the counties and districts of the Province.

STATISTICS, HOME GARDEN CONTEST

County	Number contests	Number of boys	Number of girls
Algoma	2	26	22
Brant	2	24	17
Bruce	4	60	51
Dufferin	2	30	24
Dundas	1	16	18
Durham	1	14	8
Essex	4	46	54
Frontenac	2	28	22
Glengarry	1	11	14
Grenville	2	23	22
Grey	4	110	119
Haldimand	2	30	20
Hastings	3	42	33
Huron	4	62	37
Halton	2	20	30
Kenora	2	22	28
Lanark	1	2	5
Leeds	2	28	22
Lennox and Addington	1	15	10
Lincoln	2	32	17
Manitoulin	2	19	21
Middlesex	2	28	20
Muskoka and Parry Sound	2	31	30
Ontario	3	51	49
Peel	2	32	23
Peterborough	2	25	25
Prescott and Russell	1	13	12
Prince Edward	1	16	9
Rainy River	2	20	30
Renfrew	3	34	41
Simcoe North	2	13	22
Temiskaming	2	24	24
Fort William	2	21	29
Port Arthur	1	11	14
Victoria	2	30	20
Waterloo	2	31	19
Welland	2	38	12
Wellington	2	16	18
Wentworth	3	42	34
Totals	82	1,136	1,025

JUNIOR FARMER ASSOCIATIONS

These organizations continue to serve a splendid purpose in assisting with the development of our rural young people. The aim of the organization is both self-improvement and community betterment and year by year greater evidence is noted that the organization is achieving its purpose.

The organization has a total membership of 4,558 with 166 branches. In eleven counties county organizations have been formed and these are playing an important part in encouraging the planning and carrying on of balanced programmes in their respective branches. That their programmes are many-sided and broad is attested by the following list of activities:

1. Leader Projects.
2. Stock and Seed Judging Competitions.
3. Ploughing Competitions.
4. Public Speaking Contests.

5. Debating Leagues.
6. Musical Festivals.
7. Dramatic Contests.
8. Profit Competitions.
9. Community Projects.
10. Athletic Contests and Field Days.
11. Social Activities.
12. Educational Tours and Excursions.

The comments of the Agricultural Representatives in regard to some of these activities are of interest:

Leader Training, Agricultural Representative, Peel County:

"Eight Junior Farmers coached and entered teams of Juniors in our County Judging Competition. As a result of the work of these eight leaders there were thirty extra boys taking part though another dozen or more received part-time coaching."

Agricultural Representative, Glengarry County:

"In order to train leaders who will be able to carry on work in the community, the Locheil Junior Farmers have started a policy of sending one of their members each year to the Kemptville Agricultural School to receive the necessary training for such work."

Agricultural Representative, Elgin County—(Musical Festival):

"Number of Entries..... 174
Number of Contestants..... 131
Attendance..... 1,300

This is one of the big events of the year and the festival this year exceeded any previous one. The hall was taxed to capacity and the quality of the music was excellent."

Agricultural Representative, Middlesex County:

"Debating Series—Number of branches competing, 12; number of debaters, 26.

This competition was one of the most successful debating competitions ever held by Middlesex Juniors. An excellent spirit prevailed throughout."

Junior Farmer Conferences

In order that the Junior Farmers might have an opportunity to discuss their problems and benefit from the experience of their fellow Juniors in other counties, four zone one-day conferences were held as follows:

Date	Place	Number of counties sending delegates	Number of delegates
Nov. 9th	Kemptville	9	75
Dec. 11th	Guelph	16	120
Dec. 13th	Cobourg	8	55
Dec. 14th	London	8	62

As will be noted from the programme below and which is typical of the one at all four conferences, the majority of those taking part were Junior Farmers.

That these conferences are appreciated is borne out by the following comments of the Agricultural Representative for Renfrew County:

"Fifteen young men from Renfrew attended the 1928 Junior Farmer Conference at Kemptville. This is the largest delegation ever sent from Renfrew. The boys enjoyed the conference immensely and already many of the ideas obtained there have been incorporated in programmes in their home communities."

JUNIOR FARMERS' CONFERENCE

MASSEY HALL, O.A.C., GUELPH

TUESDAY, DECEMBER 11TH, 1928

General Chairman—Laverne Dyment, Wentworth County.

10.00 a.m.—Call to order—Chairman's address.
10.10 a.m.—Short address—R. S. Duncan, Director, Agricultural Representatives Branch, Toronto.
10.20 a.m.—Difficulties being encountered in Junior Farmer Work in my County—Junior Farmer, York County.
10.30 a.m.—Weaknesses of Junior Farmer Work—John Pawley, Peel County.
10.40 a.m.—Demonstration Executive Meeting by Walkerton Junior Farmers.
11.10 a.m.—Analysis of previous number—W. K. Riddell, Agricultural Representative, Bruce County.
11.20 a.m.—Group Singing—Leader, E. F. Neff.
11.30 a.m.—Lessons gleaned from the 1928 4-H Club Leader Training School, Springfield, Mass.—Murray Allan, Middlesex County.
11.50 a.m.—Discussion.
12.15 p.m.—Joint Lunch—Chairman, Gordon Carroll, Dufferin County.
Address by Dr. G. I. Christie, President, Ontario Agricultural College, Guelph.
1.45 p.m.—A Line of Junior Farmer Work, which, judging from my own experience is worthy of more attention—Gladwyn Crow, Wellington County.
2.00 p.m.—Can Junior Farmers Co-Operate to Advantage with Fall Fair Associations? Stewart Bell, North Simcoe.
2.10 p.m.—Discussion.
2.15 p.m.—The opportunities which should be met by the Junior Farmers of Ontario—J. E. Whitelock, Assistant Director Agricultural Representative Branch, Toronto.
2.45 p.m.—Discussion.
3.15 p.m.—Resolutions.
3.30 p.m.—Adjourn to enable delegates to visit Winter Fair.

JUNIOR INSTITUTES

The activities of this organization are closely related to those of the Junior Farmer Associations. Both organizations are most successful when they work in co-operation. In many communities and counties both organizations meet the same evening. Separate meetings are held for the first hour when subjects of particular interest to respective organizations are discussed. Following this the two organizations unite and carry on a joint educational and social programme.

CHAMPION JUNIORS' TRIP TO CHICAGO

In a number of counties the junior organizations, interested individuals and firms offer free trips to Chicago as championship prizes in their county projects. The party was in charge of Campbell Lamont, Agricultural Representative for Dufferin County, and Miss Florence Eadie, of the Institutes Branch, Toronto, and had the opportunity of attending the International Live Stock Exposition and Boys' and Girls' Club Congress at Chicago. The winning juniors were as follows:

WINNERS FREE TRIP

TO

INTERNATIONAL LIVE STOCK EXPOSITION

AND

BOYS' AND GIRLS' CLUB CONGRESS, CHICAGO, ILL, U.S.A.

December 1-7, 1928

Boys:

Geo. Matthews, Delaware, Middlesex County.
Guy Helsdon, Tillsonburg, R.R. 3, Norfolk County.
Jack McMillan, Brampton R.R. 2, Peel County.
Allison Pinkney, O.A.C. Guelph, Peel County.
W. J. Bellamy, Alliston, R.R. 3, Simcoe South.
Henry Leachman, Puslinch, R.R. 1, Wellington County.
Andrew Leachman, Puslinch, R.R. 1, Wellington County.
Raymond Brown, Jerseyville, Wentworth County.

Girls:

Marjorie McLaren, Ridgetown, R.R. 2, Kent County.
Annie Salder, Lambeth, Middlesex County.
Helen Fenton, St. Williams, Norfolk County.
Mrs. Jack Fraser, Streetsville, Peel County.
Ida Clarke, Brampton, R.R. 2, Peel County.
Mary Dunton, Brampton, R.R. 6, Peel County.
Edythe Irvine, Brampton, R.R. 6, Peel County.
Eloise Gilmore, Everett, R.R. 1, Simcoe South.
Margaret Starkey, Guelph, R.R. 2, Wellington County.
Thelma Nesbit, Troy, Wentworth County.
Mrs. McIntaggart, Freelton, Wentworth County.
Pearl Krick, Stoney Creek, Wentworth County.

Junior Farmers' Ploughing Competition

The contestants in these competitions plough the required amount of land on the home farm. The Department of Agriculture supplement the prize money in the form of a grant raised by the local Junior Farmers' Associations, and also furnish the necessary judges.

As a result of the training received from these competitions, boys have been encouraged to take greater care and interest in the general cultural methods practised on the farm. In this regard the following extract from the Agricultural Representative for Dufferin County is of interest:

"The Home Ploughing Competitions have unquestionably had considerable influence in improving the quality of ploughing done in districts where the contests have been held. According to Jas. McLean, of Richmond Hill, there has been a very noticeable improvement in this respect during recent years in this county."

Statistics, Home Ploughing Competitions

County	Number of classes	Number of contestants	Total prize money paid
Bruce	8	14	$91 50
Dufferin	2	15	46 00
Elgin	7	16	62 00
Frontenac	1	10	30 00
Halton	2	22	80 00
Kent	3	15	28 00
Leeds	4	11	29 00
Muskoka and Parry Sound	8	26	73 00
Norfolk	1	9	30 00
Perth	..	13	83 00
Peterborough	2	18	50 00
Rainy River	1	11	49 00
Temiskaming	11	6	24 00
Fort William	..	16	.....
Victoria	1	9	75 00
Waterloo	1	16	50 00
York	7	40	125 00
Totals		267	$925 50

Profit Competitions

With these competitions, it is necessary for the competitors to keep cost records, and hence the young men gain a fairly accurate idea of the comparative cost of growing certain crops or in producing live stock. Closer study and application result in increased interest on the part of both competitor and parents.

A prize of a two-weeks' course at the Ontario Agricultural College, Guelph, or at the Kemptville Agricultural School affords an opportunity of gaining increased knowledge as a result of the course of study and the contacts with fellow prize-winners from other parts of the Province.

The following competitions were conducted during 1928:

	Number of Competitions	Number of Contestants
Acre Profit Competitions with barley	2	9
Acre Profit Competitions with beans	1	6
Acre Profit Competitions with sugar beets	1	4
Acre Profit Competitions with corn	1	4
Acre Profit Competitions with silage	1	5
Acre Profit Competitions with oats	5	25
Acre Profit Competitions with potatoes	4	25
Acre Profit Competitions with tobacco	1	6
Acre Profit Competitions with tomatoes	1	6
Acre Profit Competitions with wheat	1	6
Baby Beef Competitions	5	25
Feeding Hogs Competitions	5	14
Garden Club and Canning Competitions	2	54
Farm Accounting Competitions	14	167
	44	356

Acre Profit Competitions.

Competitors showing the highest net profit per acre are awarded the prizes. In order to determine cost of production and profits, the following values are used:—

MAN AND HORSE LABOUR

Man labour to be reckoned at 25 cents per hour.
Horse labour to be reckoned at 15 cents per hour.

FERTILIZER

Barnyard manure applied to this crop at $1 per ton or two-horse load.
Barnyard manure applied to previous crop at 50 cents per ton or two-horse load.
Commercial fertilizer applied to previous crop at two-thirds of cost price.
Add commercial fertilizer applied to previous crop at one-third of this year's cost price.

RENT OF LAND

To be computed on the basis of eight per cent. of the selling value of the land, this to be figured by the Representative and the Junior Farmers' Associations.

	Value of Seed Used in Planting	Value of Product Harvested
Turnips	$0 80 per lb.	$0 10 per bu.
Mangels	0 45 per lb.	0 12 " "
Potatoes	2 00 per bag	0 60 bag (90 lb.
Spring wheat	2 00 per bu.	1 15 per bu.
Oats	1 00 " "	50 " "
Barley	1 25 " "	75 " "
Pea Beans (White)	3 00 " "	3 50 " " (No. 1 pickers)
Marrowfat Beans (Yellow Eye)	3 50 " "	3 25 " "
Corn for Silage	1 50 " "	4 50 per ton

The following table gives by counties the winners and the results of each:—

County and Winner	Yield in bushels per acre	Value	Cost of production	Profit
BARLEY				
Kent:				
L. T. Gilhuly, Merlin	50	$37 50	$19 78	$17 72
Rainy River:				
Clifford Cain, Devlin	46	34 50	16 05	18 45
BEANS				
Kent:				
Gordon Carnie, Morpeth R.R. 1	38	133 00	27 55	105 45
SUGAR BEETS				
Kent:				
Thos. Swanton, Merlin, R.R. 1	15.25	106 75	43 28	63 47
CORN				
Kent:				
Kenneth Thompson, Staples	101	90 90	23 58	66 32
SILAGE				
Middlesex:				
Clarence Birchmore, Belmont, R.R. 2	19.5 tons	87 75	29 84	57 91

County and Winner	Yield in bushels per acre	Value	Cost of production	Profit
OATS				
Kent:				
Elmer Trudgen, Blenheim, R.R. 2	59	29 50	21 43	8 07
F. C. Hyatt, Wheatley, R.R. 2	44	22 00	17 57	4 43
Kenora:				
Clifford Lewis, Oxdrift	60	30 00	15 49	14 51
Lincoln:				
Cyrus E. Lowden, Glanford	75.5	37 75	15 28	22 47
Middlesex:				
Wm. Trunks, Komoka, R.R. 2	47.75	23 88	14 13	9 75
North Simcoe:				
Delbert Brown, Vasey	44	22 00	17 26	4 74
POTATOES				
Dufferin:				
Ray Marshall, Melancthon, R.R. 1	413.3	165 33	86 60	78 73
Kent:				
Glen Atkinson, Wheatley, R.R. 1	300	120 00	55 12	64 88
Rainy River:				
Clifford Strachan, Devlin	480	192 00	71 30	120 70
Port Arthur:				
Geo. Elchuk, Murillo	434	173 60	61 72	111 88
Alex. Sims, Murillo	383	153 20	51 22	101 98
TOBACCO				
Kent:				
Jas. A. McKinley, Ridgetown	1,700 lbs.	289 00	87 90	201 10
TOMATOES				
Kent:				
Albert Wellwood, Merlin	477.3	190 93	82 48	108 45
WHEAT				
Kent:				
Calvin Osborne, Ridgetown	42	48 30	18 67	29 63

BABY BEEF COMPETITION

In this competition the contestants had an opportunity of exhibiting their stock at fairs and exhibitions where certain classes were open to these boys only. The basis of award was seventy-five points for quality and finish, twenty points for lowest cost per pound of gain and five points for best kept records. Feed consumed was valued as follows:—

Ground Oats	$40 00	per ton	
Barley	45 00	"	"
Ground Peas	50 00	"	"
Ground Rye	45 00	"	"
Ground Wheat	50 00	"	"
Ground Corn	45 00	"	"
Corn on Cob	1 00	per bu.	
Bran	34 50	per ton	
Shorts or Middlings	38 50	"	"
Oil Cake	57 00	"	"
Cotton Seed Meal	65 00	"	"
Gluten Feed	45 00	"	"
Low Grade Flour	$53 00	per ton	
Tankage	64 00	"	"
Hay	8 00	"	"
Alfalfa	12 00	"	"
Straw	4 50	"	"
Silage	5 00	"	"
Turnips	4 25	"	"
Mangels	4 75	"	"
New Milk	34 00	"	"
Skim Milk	5 00	"	"
Buttermilk	5 00	"	"
Whey	2 00	"	"
Green Feed (name kind)	2 50	"	"

County and Winner	Breed	Date of birth	Weight of steer	Value	Cost feed consumed and initial cost of animal	Net profit	Score
BRUCE							
Elgin Sherman, Tara, R.R. 5	Grade Shorthorn	Feb. 26 1928	710	$90 52	$59 69	$30 83	84.7
DUFFERIN							
Ralph McEwan, Orangeville	Grade Durham	Feb. 27 1928	770	98 18	40 52	57 66	85.9
Herbert Meek, Orangeville	Grade Shorthorn	Jan. 5 1928	806	102 76	55 61	47 15	85.4
LINCOLN							
Ralph Young, Caistor Centre.	Shorthorn	Apr. 15 1928	350	44 63	30 19	14 44	86.29
MIDDLESEX							
Robt. A. Turnbull, Lambeth, R.R. 2	Aberdeen Angus	Dec. 18, 1927	740	94 35	65 06	29 29	90.
J. H. Lotan, Appin, R.R. 4	Shorthorn	Jan. 1	942	120 10	56 28	63 82	85.5
PEEL							
J. Kendall See, Malton, R.R. 4	Cross Hereford and Angus	Dec. 10	840	107 10	80 75	26 35	81.4

FEEDING HOGS

The basis of award in this competition was sixty points for highest net profit per cwt. of gain, twenty points for best kept records, twenty points for type, conformation and finish with two points deducted for every five points or fraction thereof under or over standard market weights at shipping point, that is, under 180 pounds or over 230 pounds (country points). In this competition the same feed values were used as in the baby beef competition.

County and Winner	Length of feeding period	Average weight hogs alive when marketed	Average gain in weight from six weeks of age	Value per hog of gain in weight	Average cost of feed per hog	Average net profit per hog	Average net profit per cwt. gain
BRUCE							
Elmer Palmer, Dobbinton, R.R. 1	157	207.5	183.5	$21 47	$9 37	$12 10	$6 59
MANITOULIN							
Raymond Baker, Burpee	184	192.5	164	18 41	9 18	9 23	5 61
MIDDLESEX							
Lorne McIntosh, Lambeth, R.R. 2	192	213.3	184.3	21 42	12 26	9 16	4 96
WATERLOO							
Roy Stoltz, Ayr, R.R. 1	219	206	176	20 59	12 37	8 22	4 67

GARDEN AND CANNING CLUB COMPETITIONS

In this competition the award is based on 80 per cent. for garden and 20 per cent. for exhibit.

STATISTICS

County	Name and Address Contestant	Garden Score		Canning Score		Total
			%		%	
Middlesex	Doris Logan, London, R.R. 9	94	75.2	90	18	93.2
Middlesex	Alma Shackleton, Mossley	88	70.4	98	19.6	90
Middlesex	Huldah Revington, Lucan	90	72	88	17.6	89.6
Middlesex	Frances Bignell, Komoka	85	68	100	20	88
Peel	Annie Archdekin, Brampton	94	75.2	90	18	93.2
Peel	Wilma Boucher, Brampton	93	74.4	90	18	92.4
Peel	Rachel McKenna, Malton	90	72	100	20	92
Peel	M. Fraser, Streetsville	88	70.4	98	19.6	90
Peel	Ida Clarke, Brampton	89	71.2	90	18	89.2

COUNTY STOCK JUDGING COMPETITIONS

The county stock judging competitions stimulate interest to a marked degree in good live stock. Being an annual event, the Junior Farmers prepare themselves and look forward with eager anticipation to the occasion when they will vie with one another in friendly rivalry for the coveted honour of being declared "champion live stock judge" of their respective counties.

In addition to the counties listed below, a number of other counties combine their county and royal competitions in one event. The statistics for these counties are included under Royal Judging Competitions.

STATISTICS, COUNTY STOCK JUDGING COMPETITIONS, 1928

County	No. Competitors	Prizes
Brant	22	$31 50
Bruce	86	25 00 and trophies
Carleton	33	60 00
Dufferin	55	52 00 and trophies
Durham	65	60 00
Elgin	20	75 00
Haldimand	12	.... Free trips
Hastings	16	26 25
Huron	29	25 00 and trophies
Kent	20	75 00
Lanark	32	70 00
Lennox and Addington	17	55 00
Lincoln	35	17 50
Middlesex	64	40 00 and trophies
Norfolk	22	60 00
Oxford	18	.... trophies and trip
Peel	68	209 00
Perth	37	38 50
Peterborough	60	120 00
Prince Edward	10	25 00
Renfrew	30	50 00
Simcoe South	51	75 00
Simcoe North	18	30 00
Fort William	23	40 00 and specials
Port Arthur	18	40 00
Victoria	44	45 00
Waterloo	61	90 00
Wellington	49	25 00 and trophies
Wentworth	54	91 50
York	35	250 00
Total	1,104	

Intercounty Judging Competitions.

The ambition of every young man who becomes at all interested in judging work is to some day make the team representing his county in an intercounty competition. These competitions, therefore, serve as an objective to inspire the Junior Farmer to greater achievements. With interest and ambition comes love of good live stock, followed by the decision to improve that at home. In 1928 three such competitions in live stock judging were held, namely at the Royal Winter Fair, Ottawa Winter Fair and the Provincial Winter Fair, Guelph. In addition an intercounty seed judging competition was also held at Ottawa to stimulate interest among the Junior Farmers in the sowing of good seed and control of weeds.

In all four competitions a county team must consist of three members under twenty-six years of age coached by the Agricultural Representative. The Royal competition is open to county teams from all Provinces in the Dominion. The Guelph competition is open to teams from counties west of and including Durham and Victoria and the competitions at Ottawa include counties from Northumberland and Peterborough east.

The winning teams in 1928 were as follows:—

Royal Winter Fair—Peel County.
Members of Team—John Pawley, Brampton, R.R. 2.
Arthur McCaugherty, Streetsville.
Allison Pinkney, Cooksville.
Coach—A. McGugan.

Guelph Winter Fair—York County.
Members of Team—Marshall MacMurchy, Maple.
Clark Peters, Weston.
Donald Dalziel, Maple.
Coach—M. C. McPhail.

Ottawa Winter Fair.
Live Stock Judging—Prince Edward County.
Members of Team—Sherman Black, Belleville, R.R. 7.
Frank Huff, Bloomfield, R.R. 1.
Harold Munroe, Demorestville, R.R. 3.
Seed Judging—Carleton County.
Members of Team—Algie Wallace, North Gower.
Alfred Kennedy, Dunrobin.
Wilbert Paul, Carp.
Coach, Live Stock Judging—F. J. Webster.
Coach, Seed Judging—W. M. Cockburn.

The county standing and scores at the Royal, Guelph and Ottawa Winter Fairs Intercounty Competitions, are as follows:—

INTERCOUNTY JUDGING COMPETITION, ROYAL WINTER FAIR

NOVEMBER 20TH, 1928

INTERCOUNTY SUMMARY

County	Horses	Beef cattle	Dairy cattle	Sheep	Swine	Total	County standing
Peel	474	542	468	515	551	2,550	1st
Oxford	411	517	430	467	534	2,359	2nd
Simcoe North	455	490	452	433	498	2,328	3rd
Huron	455	493	439	423	509	2,319	4th
Wellington	420	492	413	425	561	2,311	5th
Perth	439	514	461	451	437	2,302	6th
York	357	524	477	407	515	2,280	7th
Durham	436	473	475	395	488	2,267	8th
Middlesex	434	492	399	435	505	2,265	9th
Dufferin	441	489	432	438	461	2,261	10th
Waterloo	370	504	455	410	518	2,257	11th
Grey	363	501	413	461	512	2,250	12th
Carleton	381	507	443	439	476	2,246	13th
Wentworth	402	465	463	379	496	2,205	14th
Bruce	413	489	408	426	468	2,204	15th
Simcoe South	392	492	392	463	450	2,189	16th
Peterborough	385	464	439	442	439	2,169	17th
Prince Edward	398	450	426	391	498	2,163	18th
Renfrew	372	481	454	368	468	2,143	19th
Kent	396	468	383	416	473	2,136	20th
Norfolk	351	477	429	379	488	2,124	21st
Lambton	387	428	429	388	486	2,118	22nd
Lanark	397	426	421	398	451	2,093	23rd
Victoria	317	491	325	433	517	2,083	24th
Hastings	352	493	388	392	457	2,082	25th
Northumberland	326	463	456	402	417	2,064	26th
Elgin	378	428	413	383	453	2,055	27th
Halton	334	398	419	460	434	2,045	28th
Ontario	443	417	399	378	375	2,012	29th
Lennox and Addington	385	422	414	350	440	2,011	30th
Haldimand	318	449	402	403	383	1,955	31st
Leeds	359	416	405	382	380	1,942	32nd

INTERCOUNTY JUDGING COMPETITION

ONTARIO PROVINCIAL WINTER FAIR, DECEMBER 10TH, 1928

County	Horses	Beef Cattle	Dairy Cattle	Sheep	Swine	Total	County standing
York	511	482	516	508	490	2,507	1st
Perth	499	438	484	535	541	2,497	2nd
Wellington	469	455	505	500	489	2,418	3rd
South Simcoe	459	363	523	538	517	2,400	4th
Bruce	478	434	536	450	494	2,392	5th
Dufferin	498	458	509	487	419	2,371	6th
Oxford	486	359	482	499	495	2,321	7th
Wentworth	468	454	486	466	445	2,319	8th
Huron	534	349	550	494	390	2,317	9th
Brant	442	394	517	518	444	2,315	10th
Peel	430	332	516	505	529	2,312	11th
Elgin	479	465	497	414	456	2,311	12th
Lambton	497	397	503	474	433	2,304	13th
Middlesex	492	359	540	496	414	2,301	14th
Durham	445	413	522	469	433	2,282	15th
Waterloo	431	409	488	481	465	2,274	16th
Lincoln	465	335	515	481	444	2,240	17th

INTERCOUNTY JUDGING COMPETITION—*Continued*

County	Horses	Beef cattle	Dairy cattle	Sheep	Swine	Total	County standing
Welland	413	333	510	501	455	2,212	18th
Simcoe North	463	380	483	400	481	2,207	19th
Haldimand	486	305	506	482	421	2,200	20th
Grey	477	341	492	472	406	2,188	21st
Victoria	400	397	474	385	509	2,165	22nd
Kent	428	324	469	429	472	2,122	23rd
Essex	435	376	464	411	405	2,091	24th
Halton	416	274	459	402	349	1,900	25th
Ontario	266	213	341	306	306	1,432	26th (2 men only)

INTERCOUNTY JUDGING COMPETITION

Ottawa Winter Fair, December 8th, 1928

Live Stock Judging Competition

County	Horses	Beef	Dairy	Sheep	Swine	Total	County standing
Prince Edward	519	434	449	560	543	2,505	1st
Hastings	498	513	483	532	469	2,495	2nd
Carleton	487	511	465	539	483	2,485	3rd
Lanark	457	488	476	496	508	2,425	4th
Renfrew	468	481	466	533	452	2,400	5th
Northumberland	406	485	474	529	490	2,384	6th
Peterborough	416	484	476	458	542	2,376	7th
Leeds	380	480	436	523	416	2,235	8th
Prescott and Russell	444	447	394	478	429	2,192	9th
Dundas	397	433	400	495	454	2,179	10th
Frontenac	381	417	447	493	389	,2127	11th
Grenville	461	384	398	439	424	2,106	12th
Lennox and Addington	367	425	386	335	463	1,976	13th
Glengarry	412	385	358	392	397	1,944	14th

Seed Judging Competition

County	Barley	Wheat	Potatoes	Red Clover	Weeds and weed seeds	Total	County standing
Carleton	265	279	280.5	264	296	1,384.5	1st
Prince Edward	262	280	264	260	212	1,278	2nd
Prescott and Russell	257	256	177	254	251	1,195	3rd
Renfrew	262	265	247	255	161	1,190	4th
Leeds	262	263	128	207	191	1,051	5th
Dundas	244	250	201	233	117	1,045	6th
Peterborough	240	229	181.5	232	157	1,039.5	7th
Frontenac	209	252	126	241	185	1,013	8th
Lennox and Addington	218	237	158.5	218	180	1,011.5	9th
Hastings	240	255	149.5	188	138	970.5	10th

INDIVIDUAL JUDGING COMPETITIONS

Large numbers of rural young men continue to be attracted by these competitions conducted at the Central Canada, Canadian National, and Western Fairs. They serve two main purposes in that the competitors increase their knowledge of live stock, crop products, and also they afford them the opportunity of studying the wonderful exhibits at all three exhibitions.

The number of contestants in the various classes, together with prize money paid at all three points in 1928 were as follows:—

Name and date	Classes	Number of prizes	Range of prizes	Total offered	Total contestants
Canadian National Exhibition, September 5th and 6th, 1928	Heavy Horses	16	$20—$5 00	$200 00	47
	Beef Cattle	16	20— 5 00	200 00	58
Dairy Cattle	Dairy Cattle	16	20— 5 00	200 00	87
	Sheep	16	20— 5 00	200 00	45
	Swine	16	20— 5 00	200 00	48
	Poultry	16	15— 50	120 50	18
	Roots and Grain	16	15— 50	120 50	62
	Fruits and Vegetables	16	15— 50	120 50	17
Central Canada Exhibition, August 20th, 1928	Heavy Horses	9	15— 7 00	99 00	25
	Beef Cattle	9	15— 7 00	99 00	19
	Dairy Cattle	9	15— 7 00	99 00	47
	Sheep	9	15— 7 00	99 00	28
	Swine	9	15— 7 00	99 00	23
Western Fair, London, September 11th, 1928	Heavy Horses	6	10— 1 00	40 00	31
	Beef Cattle	6	10— 1 00	40 00	43
	Dairy Cattle	6	10— 1 00	40 00	37
	Sheep	6	10— 1 00	40 00	27
	Swine	6	10— 1 00	40 00	30

Total prize money offered at fairs.....$2,056 50

Immediately following the completion of the judging competitions at the Canadian National Exhibition, the Junior Farmers and Junior Institute competitors, to the number of 506, with their county banners, marched through the grounds led by the pipe band.

The entire party were guests of the Exhibition at dinner and later in the evening were again entertained by the Directors at the evening performance before the grand stand.

GIRLS' HOUSEHOLD SCIENCE JUDGING COMPETITION

At the Inter-County Competition in Household Science Judging, twenty-six counties competed for the C.N.E. trophy. Each of these counties was represented by a team of three young ladies under twenty-six years of age. In addition an individual competition was held and this attracted 125 competitors.

Central Canada Exhibition, Ottawa.

A Household Science Inter-County Judging Competition was inaugurated at Ottawa in 1928. This competition was open to teams of three girls each from

counties in Eastern Ontario, east of and including Northumberland and Peterborough. Eight counties participated for the trophy.

Previous to these competitions training schools are conducted at different points in the majority of the counties under the joint auspices of the Institutes Branch and the Agricultural Representatives.

Western Fair, London.

At the Western Fair, London, an individual Household Science Judging Competition was held on September 11th. This feature attracted thirty-four young ladies from counties in Western Ontario.

The comment of the Agricultural Representative for Lanark County with reference to the Household Science Judging Competition at Ottawa is of interest:—

"This competition gives promise of developing and being just as popular among the girls as the live stock judging has been among the boys, both of which should serve a most valuable purpose. Already the fruits of the boys' competitions are being reaped in the form of decidedly better live stock on the farms of many of the ex-team members. This benefit is not stopping with the members alone as neighbours are seeking the advice of many of these boys in the selection of breeding stock."

THE ROYAL FIVE HUNDRED

The second Junior Farmers' Trip to Toronto brought four hundred and seventy young men as guests of the Ontario Department of Agriculture during the first week of the Royal Agricultural Winter Fair. This party was made up of ten boys from each county in Southern Ontario and five boys from each district in Northern Ontario. The method of selection was by means of a special judging competition known as the "Royal" conducted in each county and district in the Province where an Agricultural Representative is located. The conditions governing the competition were as follows:—

(a) Contestants shall judge five rings of live stock, five classes of crop products and one of poultry.

(b) The competition shall be open to all farmers and farmers' sons, living on the farm, between the ages of sixteen and twenty-three on October the 1st, 1928, and who have not previously represented the county as a member of a stock judging team at the Royal Winter Fair or as a member of the "1927 party of 500" or who are not graduates of an agricultural college or school.

The project has the general approval of the public. It is but natural that it should be appreciated by all participants, but in addition it has not only met with the favour of rural parents, but also the support of the urban industry.

The following extract is taken from the annual report of the Agricultural Representative for Rainy River district:—

"No recent project in Junior Work has been of more general interest than that of the "Royal" Judging Competition. Requests from groups of young people for coaching in judging bespeaks a more than passing interest. The 1928 list of competitors showed an increase of 43 per cent. over that of 1927, surely an indication of more general interest. Experiences gained through the local competition and later by the winners at the Royal must necessarily have their effect, and new methods will thrive where the old lay dormant."

STATISTICS, ROYAL JUDGING COMPETITIONS

County	Number of competitors	Number winning trip
Algoma	31	5
Brant	22	10
Bruce	44	10
Carleton	35	10
Cochrane	16	5
Dufferin	28	10
Dundas	19	10
Durham	65	10
Elgin	39	10
Essex	24	10
Frontenac	55	10
Glengarry	36	10
Grenville	23	10
Grey	55	10
Haldimand	41	10
Hastings	13	10
Huron	36	10
Halton	25	10
Kenora	10	5
Kent	38	10
Lambton	46	10
Lanark	56	10
Leeds	16	10
Lennox and Addington	35	10
Lincoln	35	10
Manitoulin	14	5
Middlesex	49	10
Muskoka and Parry Sound	22	10
Norfolk	12	10
Northumberland	28	10
Ontario	42	10
Oxford	32	10
Peel	68	10
Perth	37	10
Peterborough	23	10
Prescott and Russell	30	10
Prince Edward	28	10
Rainy River	43	5
Renfrew	35	10
Simcoe South	51	10
Simcoe North	24	10
Sudbury	36	5
Temiskaming	6	5
Fort William	25	5
Port Arthur	13	5
Victoria	33	10
Waterloo	61	10
Welland	21	10
Wellington	21	10
Wentworth	47	10
York	21	10
Total	1,615	

The programme for the "Royal Five Hundred" was as follows:—

TUESDAY, NOVEMBER 20TH—REGISTRATION DAY

In charge of J. A. Carroll and J. E. Whitelock, Assistant Directors, Agricultural Representative Branch.

Members of the party will be lodged in the Ford Hotel, corner Bay and Dundas Streets.

Boys will register at the Ford Hotel between the hours of 8.30 a.m. and 6.30 p.m.

6.45 p.m.—Leave Ford Hotel for Hart House.
7.30 p.m.—Dinner, Hart House, University of Toronto, guests of the Ontario Government.
Chairman: Hon. John S. Martin, Minister of Agriculture.
Addresses by:
Hon. G. Howard Ferguson, Prime Minister of Ontario.
Hon. Dr. H. J. Cody, Chairman Board of Governors, University of Toronto.

WEDNESDAY, NOVEMBER 21ST

7.00 a.m.—Breakfast, Brown's Restaurant, Ford Hotel.
8.20 a.m.—Leave Ford Hotel on special street cars for Union Stock Yards, West Toronto.
9.00 to 12.00 noon—Tours of Union Stock Yards and Packing Plants.
12.00 to 1.30 p.m.—Luncheon, guests of the Industrial and Development Council of Canadian Meat Packers.
1.45 p.m.—Leave Packing Plants on special street cars for the Massey-Harris Company, Limited, manufacturers of Farm Implements, corner of King Street and Strachan Avenue.
2.15—5.00 p.m.—Tour of plant of the Massey-Harris Company, Limited.
5.15 p.m.—Cafeteria supper—guests of the Massey-Harris Company, Limited.
6.30 p.m.—Group Singing.
7.15 p.m.—Leave for Royal Winter Fair.
8.00 p.m.—Guests of the Royal Winter Fair for the Horse Show and Performance in the Coliseum Arena.
11.00 p.m.—Leave Royal Winter Fair on special street cars for Ford Hotel.

THURSDAY, NOVEMBER 22ND

7.00 a.m.—Breakfast, Brown's Restaurant, Ford Hotel.
8.15 a.m.—Leave Ford Hotel for tour of Mail Order Departments of the T. Eaton Co., Limited, and the Robert Simpson Company, Limited.
10.00 a.m.—Leave by special street cars for Royal Winter Fair.
10.30 a.m.—Inspection of exhibits and studying the judging of live stock in the Arenas.
11.30 a.m.—Luncheon, Coles Restaurant, Royal Winter Fair.
5.00 p.m.—Assemble outside Main Entrance, Live Stock Building, beside street car loading platform.
5.15 p.m.—Leave Royal Winter Fair by special street cars for the T. Eaton Co., Limited.
5.45 p.m.—Banquet—Guests of the T. Eaton Co., Limited.
8.00 p.m.—Theatre Party, Pantages, 263 Yonge Street. Guests of the T. Eaton Co., Limited.

FRIDAY, NOVEMBER 23RD

7.00 a.m.—Breakfast, Brown's Restaurant, Ford Hotel.
8.00 a.m.—Leave for tour of Parliament Buildings.
9.00 a.m.—Taking of group photograph.
9.15 a.m.—Leave Parliament Buildings by motor coaches for a drive around the city as guests of the City of Toronto.
11.15 a.m.—Arrive Royal Winter Fair.
11.30 a.m.—Luncheon, Coles Restaurant, Royal Winter Fair.
5.00 p.m.—Assemble outside main entrance, Live Stock Building, beside street car loading platform.
5.15 p.m.—Leave Royal Fair by special street cars for the Robert Simpson Company, Limited.
6.00 p.m.—Banquet—Guests of the Robert Simpson Company, Limited.

SATURDAY, NOVEMBER 24TH

7.00 a.m.—Breakfast, Brown's Restaurant, Ford Hotel.
The party will disband.

It was a tired party of four hundred and seventy boys who wound up their three day trip to Toronto on Friday, November 23rd, tired but happy, for the itinerary proved to be an unfailing source of hitherto unknown delightful features.

In addition to having the opportunity of spending a portion of each day at the wonderful Royal Agricultural Winter Fair, the City of Toronto, large industries and other organizations and individuals vied with one another in entertaining the party.

In order to encourage keen observation every boy was urged to participate in an essay contest. The essay was to deal with the features of the trip which most impressed the writer and was to be submitted shortly after the conclusion of the trip. In each County and District book prizes were awarded to the writers of the three best essays. The winning essay from each of the fifty-one Counties and Districts then competed for the ten Provincial awards, each consisting of a two weeks' short course at either the Ontario Agricultural College or Kemptville Agricultural School, with transportation, board and lodging defrayed by the Ontario Department of Agriculture. The names of the winners are as follows:

County	Name and Address of Winner
Lambton	Frank A. Edwards, Watford, R.R. 4.
Simcoe North	Mervyn Galbraith, Stayner, R.R. 3.
York	Earle Scott, King.
Bruce	A. L. C. McKinnon, Tiverton, R.R. 3.
Middlesex	Cameron McTaggart, Glencoe, R.R. 4.
Manitoulin	Wm. T. McCullough, Tehkummah.
Wellington	Harold Pridham, Harriston, R.R. 2.
Oxford	Alex. Muir, Woodstock, R.R. 3.
Northumberland	Percy Honey, Dartford.
Lanark	W. E. Park, Carleton Place, R.R. 1.

Altogether two hundred and forty-four essays were submitted and if their observations and comments may be used as a criterion, the boys obtained a new vision of city life, new ideas and inspiration for the improvement of their own industry and went home with greater respect for the farm and a more kindly feeling manifested towards urban dwellers. All of these are depicted in the essay submitted by Frank Edwards, of Watford, Lambton County:—

OUR ROYAL WINTER FAIR TRIP

"Truly it had been a hectic day! Each and every one of fifty young men had been striving with all their intelligence in judging contests—contests which were to decide the participants in 'that trip to the Royal.'

As I waited for the results I thought over the events of the day, and I concluded that each one of us had been amply repaid for loss of time that day. Never before had the differences in seeds been appreciated until one had seen good, bad and indifferent all lined up together.

When our County Representative came in and announced my name among the winners, you may imagine my delight. I might say I would have made a *real celebration* if I could then have foreseen the trip.

Any government is far-seeing that undertakes an educational scheme of this type. From it we have caught a new vision. It has given us new energy. And now we are going to show the Government that the expenditure is justified.

Our time was always taken up. No sooner had we registered on Tuesday than it was time to parade to Hart House for the Government banquet. We could hardly be complimented, for instance, on keeping step, but we did make a rather formidable half-mile line-up of jocular fellows. And you should have heard the yells we gave at those banquets. We five hundred huskies could drown the roar of Niagara, I'll wager. And the songs! Don't inquire about the musical part of it. The spirit was there and that's what counted.

On arriving at Hart House we sat down to an appetizing banquet, after each had an introduction to the Premier and Hon. Mr. Martin. The feature of the evening was Mr. Ferguson's talk, which might be entitled, 'Our Duty as Citizens.' In it he showed how it is not only our duty, but to our advantage to aid in everything which is for the general benefit of the community in which we live. He gave us a new angle on citizenship and most of us will remember for a long time the Premier's inspiring message.

Next day we went through the abattoirs. It was an 'eye-opener.' After watching the different processes, I overheard one boy exclaim, 'Me for the farm.'

The impressive feature, perhaps, was the cold storage rooms. In the dressed carcasses one could clearly discern those of quality from those of inferior quality. It gave us the lesson that a quality carcass must necessarily come from a well-finished animal. The better finished steer makes better cuts, brings a better price to the farmer, packer and retailer, and most important

of all, it makes better satisfied customers. In a nut-shell it is co-operation, which is a slogan of the Meat Packers' Association, whose guests we were at luncheon.

Space will not permit of an elongated account of other commercial organizations visited. At the Massey-Harris Company the moulding and drop-forging departments were spectacular. And the simple ways nuts and bolts were turned out of automatic machines made one fear for over-production.

At Simpson's and Eaton's we saw what organization can do. We appreciated the courtesy of these firms in showing us 'inside stuff.' It rounded out our knowledge by giving us an idea of how the other half of the world lives. It brought home the interdependence that exists between country and city.

Each of these firms generously served us a banquet and provided diversified entertainment.

Worthy of special mention is one address given at Eaton's banquet—it was the address of Dr. Christie, President of the O.A.C. He pointed out that real prosperity on the farm depended on individual application of present-day scientific knowledge. He summarized his talk with the following challenging quotation:

'To each is given a bag of tools,
A shapeless mass, and a book of rules,
And each must build e'er life has flown
A stumbling-block or a stepping-stone.'

And now we come to the Royal itself—the farm under roof with acres of cattle, countless flowers, miles of poultry and many other attractions.

It is rumoured by some that many of us regarded this trip as merely a chance to have a good time. These people must never have seen the 'Royal.' We did have a good time, but we got something else; an inspiration to excel in our work. In the next dictionary the 'Royal' will mean the 'Best.'

One can see yet the almost perfect outline and feel the excellent fleshing of that low-set Aberdeen Angus steer which proved Grand Champion.

And the Horse Show! Once seen, never forgotten is the brilliant drill of the Royal Dragoons with its pleasing lighting effect. How graceful were the light-footed jumping horses! And how interesting it was to watch a lady guide the "white horse" which performed many intelligent feats.

Hours could be spent looking at the poultry. And still more hours could be spent looking at modern farm machinery. An inspection of it might save you backaches with a profit in years to come.

And the flower show must be included! Banks upon banks of multi-coloured flowers, beautiful sprays of roses, majestic ferns, made an atmosphere perfumed without an atomizer; a miniature paradise!

Now, after four busy days we were tired and ready for home.

We enjoyed our trip. We even enjoyed the flattery and blarney handed out by many after-dinner speakers. Even in a packing plant one cute fair thing said: 'Where do all you nice-looking boys come from?' That is worth remembering!

But you did not fool us, Mr. City Dweller. We saw both the bright and dark sides of city life. We saw you working in clammy abattoirs, in grimy foundries, and in stuffy offices. During the trip we broadened both our knowledge of Agriculture and our knowledge of city life. We have new ideals now which will give us an impetus for our farm work.

And so we are glad to leave you, Mr. City Dweller—you with your ceaseless noise, your smoky dirt, and your nervous tension. We have gone back to the old farm, out to the fresh air, out where Heaven begins—the Country."

Free Short Courses donated by The Robert Simpson Company, Limited.

Still another feature of the trip was the award of two weeks' short courses to twenty members of the party by the Ropert Simpson Company, Limited.

The Ontario Department of Agriculture was requested to select the young men and an examination paper, based on the trip, was prepared. Two hundred and twenty-one young men tried the examination which was held in the different counties and districts under the supervision of the Agricultural Representatives. In making the final awards the Province was divided into zones to ensure all parts of Ontario being represented.

The fortunate young men, together with the name of the institution they will attend are as follows:—

THE ROBERT SIMPSON COMPANY, LIMITED, AWARDS COURSES AT O.A.C., GUELPH

County	Name and Address.
Middlesex	Geo. Munro, Glanworth.
Huron	G. Reynolds, Seaforth.
Kent	Geo. L. Spence, Northwood.
Norfolk	R. W. Lundy, Port Dover, R.R. 1.
Welland	Evan Nugent, Welland Junction.
York	Marshall McMurchy, King.
Halton	Stewart Miller, Georgetown.
Waterloo	Ira Zellar, Breslau.
Durham	Emery Smith, Cavan, R.R. 1.
Rainy River	Maurice McMillan, Emo.
Algoma	Donald Smith, MacLennan.
Parry Sound	Robt. G. Creasor, Utterson, R.R. 1.
Ontario	Chas. J. Hadden, Blackwater.
Temiskaming	Norman Webb, Thornloe, Box 34.

COURSES AT KEMPTVILLE

Prince Edward	John Black, Belleville, R.R. 7.
Leeds	Claude McRadey, Lansdowne, R.R. 3.
Renfrew	Harold Gallagher, Douglas.
Prescott and Russell	Leslie H. Cross, L'Orignal.
Peterborough	Gordon Hancock, Peterborough, R.R. 2.
Carleton	W. Raymond Wilson, Kenmore.

Month's Courses in Agriculture and Home Economics.

With the realization that education is an essential factor in successful farming and home-making, rural young people are availing themselves more and more of the opportunity presented through the short courses in Agriculture and Household Science. In 1928, thirty-one month courses and four five-week courses in agriculture were held. The total enrolment was 1,280 with an average of 36.5 per course. In addition to this two three-weeks' courses and eight two-weeks' courses were held with an enrolment of 292 students.

In Home Economics four week's courses were held in thirty counties. The total enrolment was 1,085 with an average of thirty-five per course. In Northern Ontario eleven special two-weeks' courses in Home Economics were held with an average enrolment of 21.5 which embraced a study of foods and cookery, home nursing, sewing and millinery run concurrently with the courses in Agriculture.

The success of these courses depends to a large extent on the interest and support of the local people. That this is being received is indicated by the attendance. In this regard the comment of the Agricultural Representative for Huron County is of interest:

"The whole-hearted way in which the people of Seaforth backed the courses was a very pleasing feature. These were, perhaps, the best courses ever held in the county and the after effects in the form of strong Junior organizations are encouraging."

Three Months' Courses in Agriculture and Home Economics.

Six schools of this type were held in the Province. The three-months' courses not only permit a much more comprehensive study of the technical subjects, but also permit the inclusion of such subjects as music and more time for the study of mathematics, public speaking, English grammar and literature.

The points at which three months' schools were held, together with the attendance at each, are as follows:—

County	Place	Agriculture		Home Economics	
		Number on roll	Average attendance	Number on roll	Average attendance
Bruce	Paisley	60	26	56	24
Haldimand	Jarvis	56	35	78	54
Hastings	Trenton	23	15	25	15
Lincoln	Beamsville	60	39	42	25
Waterloo	New Hamburg	40	29	42	28
Wentworth	Mount Hope	51	29	33	27
Total		290	173	276	149
Average		48	29	46	25

At the conclusion of many of these courses the students and other young people of the community formed Junior Farmer and Junior Institute organizations with the idea of having their community represented in the activities of the county Junior programme.

The lecturers and demonstrators for all household science subjects were supplied by the Institutes Branch of the Ontario Department of Agriculture.

Special Swine Courses at Packing Plants.

In co-operation with the Canadian Swine Breeders' Association, the Industrial and Development Council of Canadian Meat Packers and the Provincial and Federal Live Stock Branches, three such courses were held in 1928.

At these courses the lecturers and demonstrators link up the market demands, illustrated by the suitable carcass with the type of live hog required to produce that carcass.

The comment of the Agricultural Representative for Lanark County on these courses is of interest:—

"These courses have done much to smooth out the rough places between the farmers and the packer. There seems to have been a strong feeling of suspicion among the farmers that the packers were getting the big end of the stock, but after these trips the boys are much more liberal in their views and can see that there are faults on both sides. These courses, too, are putting the bacon hog in a much better light with many of the farmers who feel that they cost more to produce and are not of any more value when produced. The demonstrations prove beyond doubt the superior value of the bacon type over the nondescript hog."

The courses held in 1928 were as follows:

Place	Date	Counties included	Attendance
Toronto	Feb. 9, 10, 11	Hastings, Prince Edward, Northumberland, Peterborough, Victoria, Durham, Ontario, York, Peel, Halton, Dufferin, Simcoe North, Simcoe South, Muskoka and Parry Sound	62
Toronto	Feb. 13, 14, 15	Grey, Norfolk, Brant, Haldimand, Welland, Lincoln, Wentworth, Bruce, Huron, Middlesex, Oxford, Wellington, Perth, Waterloo	84
Montreal	Mar, 13, 14, 15	Renfrew, Carleton, Lanark, Leeds, Prescott and Russell, Glengarry, Dundas, Grenville, Frontenac, Lennox and Addington	55
		Total	201

Special Farm Mechanics Courses.

In response to public demand eighteen special one-week courses in Farm Mechanics were inaugurated in 1928. The course of study included lectures and demonstrations in rope splicing, paints, tools, farm implements, concrete, soldering, electricity on the farm, gas engines, tractors and rural sanitation.

The courses were particularly well received and much appreciated at all points. Courses with the attendance at each were held as follows:—

County	Place	Enrolment	Average attendance
Dufferin	Orangeville	23	17
Durham	Orono	65	50
Essex	Amherstburg	20	18
Elgin	St. Thomas	60	56
Grey	Owen Sound	40	22
Halton	Acton	23	15
Huron	Seaforth	42	35
Kent	Morpeth	31	25
Lambton	Petrolia	30	27
Lanark	Perth	6	6
Middlesex	Delaware	48	35
Northumberland	Warkworth	50	31
Ontario	Beaverton	60	36
Peel	Cheltenham	75	55
Prescott and Russell	Plantagenet	40	40
North Simcoe	Elmvale	70	54
Victoria	Woodville	50	38
Welland	Fenwick	44	44
Totals		777	604

CONFERENCES

The twenty-first Annual Conference was held at the Ontario Agricultural College, Guelph, June 25, 26, 27 and 28 inclusive. This annual event continues to add much to the efficiency of the service. Problems encountered during the past year and new projects to be undertaken are considered both in special committees and in open conference.

In order to consider problems confined to counties in special areas, one-day zone conferences were also held as follows: North Bay, March 1st, 1928; Kemptville, April 24th; Brighton, April 25th; Hamilton, April 27th; St. Thomas, May 2nd; Arthur, May 4th.

HOME DEMONSTRATION WORK, PEEL COUNTY

The extent to which the services of the Home Demonstrator are in demand by the women and girls of the county of Peel is partially depicted in the following statistics:—

	1928
Office callers	992
Telephone calls (incoming)	1,500
Letters received (approximately)	1,500
Letters sent	1,167
Circular letters sent	2,007
Bulletins given out	3,538
Meetings addressed	105
Attendance	7,297
Special Short Courses	17

Schools visited	42
Rural Home Visits	193
News Articles written	23
New organizations	5
Half-days in office	186
Miles travelled by car	6,300

That the various women's organizations in all parts of the county are availing themselves of the Home Demonstrator's services is still more clearly shown in the following list of meetings addressed during the past year:—

Date	Place	Nature	Subject	Attendance
Nov. 1/27	Belfountain	Women's Institute	Foods and nutrition	25
Nov. 2	Erindale	Women's Institute	Foods and nutrition	22
Nov. 8	Malton	Women's Institute	Foods and nutrition	40
Nov. 9	Cheltenham	Women's Institute	Foods and nutrition	30
Nov. 10	Snelgrove	Women's Institute	Foods and nutrition	36
Nov. 15	Toronto	W. I. Convention	Education and better schools.	700
Nov. 18	Streetsville	Women's Institute	Nutrition	15
Nov. 25	Office	J.I. and J.F.A.	Executive	15
Dec. 6	Inglewood	Women's Institute	Nutrition	24
Dec. 7	Erindale	Women's Institute	Nutrition	23
Dec. 8	Snelgrove	Women's Institute	Nutrition	35
Dec. 9	Streetsville	Women's Institute	Nutrition	21
Dec. 13	Malton	Women's Institute	Nutrition	55
Dec. 14	Cheltenham	Women's Institute	Nutrition	11
Dec. 15	Toronto	Social service	Committee	10
Dec. 19	Elmbank	Short Course	Community meeting	40
Jan. 27/28	County	Brampton and Tullamore	Juniors	115
Feb. 3	Brampton	Trinity Short Course	Closing Exercises	300
Feb. 7	Clarkson	Women's Institute	Judging Cake Contest	52
Feb. 9	Port Credit	Women's Institute	Foods	95
Feb. 8	Snelgrove	Women's Institute	Eggs	35
Feb. 10	Mt. Pleasant	Young People's Soc.	Judging debate	200
Feb. 16	Cooksville	J.I. and J.F.A.	Debates	75
Feb. 18	Court House	Central School Fair.	Meeting—Prize list	7
Feb. 20	Brampton	C.G.I.T.	Home Economics	14
Feb. 27	Brampton	St. Pauls Y.P.S.	Debate	47
Feb. 28	Brampton	C.G.I.T.	Home Economics	18
Mar. 1	Woodhill	U.F.W.O.	Interior Decorating	50
Mar. 5	Brampton	C.G.I.T.	Home Economics	15
Mar. 7	Erindale	Women's Institutes.	Nutrition	50
Mar. 8	Snelgrove	Women's Institutes.	Nutrition	39
Mar. 13	Toronto	C.N.E. Committee.	Programmes	5
Mar. 14	Malton	Women's Institute	Nutrition	42
Mar. 15	Toronto	Social Service Com.	Literature	8
Mar. 19	Brampton	C.G.I.T.	Home Economics	30
Mar. 20	Office	Junior Institute	Executive	17
Mar. 21	Brampton	Brampton Choral Club	Musical Festival	75
Mar. 21	Cheltenham	Women's Institute	Nutrition	22
Mar. 22	Snelgrove	Women's Institute	Nutrition	24
Mar. 22	County	Trinity Juniors	Activities	100
Mar. 27	Brampton	Young People's Soc.	Homecraft	65
Mar. 23	Streetsville	J.I. and J.F.A.	Debate	75
Mar. 30	Meadowvale	Women's Institute	Soups	30
Mar. 30	Elmbank	Trinity Juniors	Executive	6
Apr. 3	Woodbridge	Junior Institute	Poultry	24
Apr. 4	Erindale	Women's Institute	Nutrition	37
Apr. 5	Toronto	Commitee meeting.	Coaching work	14
Apr. 11	Cheltenham	Women's Institute	Milk Lesson	17
Apr. 12	Office	Choral Committee	Music Festival	8
Apr. 12	Snelgrove	Women's Institute	Nutrition	22
Apr. 19	Meadowvale	Women's Institute	Soups	24
Apr. 24	Tullamore	Junior Institute	Public speaking	25
Apr. 28	Victoria Square	Junior Institute	Poultry raising	30

Date	Place	Nature	Subject	Attendance
May 2	Erindale	Women's Institute	Nutrition	27
May 4	Belfountain	Women's Institute	Nutrition	37
May 9	Cheltenham	Women's Institute	Nutrition	39
May 4	High School	J.I. and J.F.A.	Final Debate	50
May 10	Guelph	Girls' Conference	Discussion Group	75
May 11	Guelph	Girls' Conference	Living Rooms	75
May 11	Guelph	Girls' Conference	Income Earning	250
May 12	High School	Junior Institute	Public Speaking	250
May 14	Streetsville	J.I. and J.F.A.	Annual Meeting	30
May 15	Guelph	Committee Meeting	Junior Extension	17
May 22	Lorne Park	Peel W. I.	Executive	4
May 23	Brampton	Choral Club	Concert	36
May 28	Baptist Ch	Peel W.I.	Annual Meeting	155
May 30	Brampton	Junior Institute	Home Economics	60
May 30	Streetsville	Choral Club Concert	Closing Exercises	75
June 2	Brampton	Musical Festival	Individual entries	75
June 2	Brampton	Musical Festival	General programme	400
June 9	Ferndale	Field Day	Sports	300
June 12	Bolton	Junior Institute	Choral work	65
June 29	Port Credit	Peel S.M.I. Com	Annual Report	10
June 30	Hamilton	Chicago Reunion	Programme	125
Aug. 10	Toronto	Committee	C.N.E.	5
Aug. 14	Office	J.I.	Judging practice	16
Aug. 15	Claremont	District W.I.	Rural Education	70
Aug. 16	Office	County Team	Judging	3
Aug. 17	Newmarket	Judging competition	Results	55
Aug. 20	Sandhill	Judging	Practice	8
Aug. 21	Caledon	Judging	Practice	6
Aug. 22	Cheltenham	Judging	Practice	3
Aug. 24	Office	County Team	Jugding practice	3
Aug. 27	Cheltenham	Judging	Practice	16
Aug. 28	Office	Judging Practice	County Team	3
Sept. 5	Toronto	C.N.E. judging	Order	200
Sept. 6	Toronto	C.N.E. W.I. tent	Charge	300
Sept. 7	Toronto	Women's Press Club	Home Demonstration	75
Sept. 11	Brampton	School Fair	First Aid	150
Sept. 12	Inglewood	School Fair	First Aid	100
Sept. 13	Bolton	School Fair	First Aid	75
Sept. 14	Cooksville	School Fair	First Aid, School Nurse	..
Sept. 20	Caledon	School Fair	First Aid	100
Sept. 21	Ebenezer	School Fair	First Aid	250
Sept. 24	Office	County J.I.	Executive	16
Sept. 28	Port Credit	Community Fair	Nutrition	500
Oct. 12	Caledon E.	Women's Institute	Canadian poets	30
Oct. 9	Dixie	Women's Institute	Interior Decorating	35
Oct. 15	Brampton	Peel W.I. Exec	Health Campaign	19
Oct. 16	Bolton	Junior Institute	Judging practice	7
Oct. 17	Caledon	Junior Institute	Judging practice	5
Oct. 20	Streetsville	Junior Institute	Judging practice	14
Oct. 22	Brampton	Junior Institute	Judging practice	24
Oct. 24	Cheltenham	Junior Institute	Judging practice	12
Oct. 27	Brampton	Judging competition	Banquet results	125

Total Meetings	105
Total attendance	7,297

Included in the above list are seven special courses in Nutrition to as many different organizations. Each of these courses consisted of six lectures and demonstrations. An average attendance of over thirty-one for each of the forty-two classes speaks well for the interest and contacts gained. Two other special courses in Handicrafts with a total of five lectures at the end of the fiscal year are also included.

Junior Institutes.

The fame of Peel Junior Institutes has travelled to all parts of the Province. The credit for the success of these organizations can largely be given to the Home Demonstrator who has served as the organizer and inspirer of the local leaders. At a number of women's and girl's conventions and meetings held during the past year members of the Peel Junior Institute gave demonstrations and addresses on some of their varied activities.

The following table taken from the report of the Home Demonstrator gives a summarized report of the activities of the branch Junior Institutes:—

SUMMARIZED REPORT

Group	Membership paid up	Meetings	Addresses	Attendance	Receipts	Expenditures
County	all branches	5	..	481	$361 00	$314 41
Brampton	43	11	10	387	348 39	235 64
Bolton	30	6	17	350	104 23	44 65
Caledon	28	11	13	160	85 58	69 78
Caledon E	25	10	11	253	42 69	29 80
Clarkson	20	7	5	105	270 38	190 27
Trinity	44	2	2	165	73 37	20 02
Tullamore	36	11	33	211	80 88	46 20
Streetsville	19	4	8	120	49 67	40 14
	245	67	99	2,232	1,416 19	990 91

The activities of the county organization will be reflected to some extent by the following list of activities and approximate attendance at each:—

COUNTY ACTIVITIES

Musical festival	400
Girls' public speaking contest	275
Field Day	120
County Judging Contest	85
Banquet (judging) (girls)	65
Girls' judging, C.N.E.	36
Girls' Garden Club	30
Debating Series with J.F.A.	300
Demonstration Tent at Fall Fair	800

Special mention should be made of the choral work for whose organization the Home Demonstrator was largely responsible. In this regard the following extract from the Home Demonstrator's annual report is of interest:—

"The Musical Festival was held on the first Saturday in June. At the afternoon session there were fourteen entries in soprano, tenor and bass classes. The evening session brought a capacity house (400) to hear the concert programme given by winners and the violin and choral competitions. Entries were made from Brampton, Caledon, Churchville, Cooksville, Huttonville, Norval, Terra Cotta and Tullamore."

GIRLS' GARDEN AND CANNING CLUB

This competition supervised by the Home Demonstrator brought out thirty competitors. Twenty-two girls carried the project through to completion both in regard to the garden, the necessary canning and the exhibits at the county fair.

The awards were based 80 per cent. on garden score and 20 per cent. on canning. The following young ladies receive a two-weeks' short course at Macdonald Institute with transportation, board and lodging defrayed by the Ontario Department of Agriculture:—

Name	Address	Garden Score		Canning Score		Total
			%		%	%
Annie Archdekin	Brampton, R.R. 4	94	75.2	90	18	93.2
Wilma Boucher	Brampton, R.R. 1	93	74.4	90	18	92.4
Rachel McKenna	Malton, R.R. 2	90	72	100	20	92
Mary Fraser	Streetsville, R.R. 3	88	70.4	98	19.6	90
Ida Clarke	Brampton, R.R. 2	89	71.2	90	18	89.2

In addition to the activities already mentioned, the Home Demonstrator assisted with the regular five weeks' course in Home Economics; took charge of the County Household Science Judging Competition which attracted seventy-nine entries; assisted with school fairs and other junior projects.

CO-OPERATION AND MARKETS BRANCH

Co-Operative Organizations

Previous reports of this branch have shown that co-operative organizations among farmers are more widely prevailent than is generally supposed. An endeavour has been made to ascertain the approximate amount of co-operative business in the Province, but this has been found difficult due to the lack of compulsory requirements for return. Indications of the general situation, however, are suggested from the voluntary returns of a number of the co-operative companies. Eliminating the few large concerns, fifty-six firms report a total membership or shareholders of 8,500 or an average of 152 shareholders. Forty-nine companies have a total paid up capital of $256,400, or an average of $5,230. Forty-two of these smaller companies report a total turnover of $2,610,244, or an average of $62,148. The business of these companies ranges all the way from a few hundred dollars to $250,000 per company. Adding to the above figures the returns of the larger companies. such as the United Farmers' Co-Operative, Ltd., with its 20,000 shareholders and over $20,000,000 turnover. The Canadian Co-operative Wool Growers handling wool for 4,000 Ontario sheep men; The Ontrio Honey Producers with business amounting to $590,000; The United Dairymen Co-operative Limited, handling over $3,500,000 worth of cheese, it is seen that the co-operative business of the Province is impressive. The business of the above firms alone totals over $26,500,000. The fifty or so small firms reporting as above are only about one-fourth of the number of such co-operatives in the Province, and in addition there is a large number of unincorporated farmers' organizations selling various farm products, buying supplies and carrying on numerous business activities. About one-third of the live stock marketed in the Province is shipped co-operatively. It might be conservatively estimated, therefore, that at least $50,000,000 of farmers co-operative business in marketing farm produce and in buying supplies is carried on annually in the Province.

As is true with other types of business, not all co-operative companies are successful. One important failure is to be noticed this year. The Canadian Tobacco Growers Co-operative, Ltd., organized in 1920, ceased operations in 1928. Co-operative marketing of tobacco is admittedly a difficult undertaking for growers, due to several factors, chief of which might be mentioned the large amount of capital required. An exceptionally large crop the first year of operation of the company created difficulties which were hard to overcome; a poor quality crop a year ago increased the financial difficulties which eventually forced an assignment. It should be stated, however, that as a result of the operations of the company, the general marketing conditions of Ontario tobacco are greatly improved over those of 1920 and previous years. Many of the growers, both members and non-members of the company, realize the benefits of a growers' organization. The company is to be credited with opening the British market for Canadian raw leaf. Previous to 1920, Canada exported only 223,595 lbs. of unmanufactured tobacco, while in 1928 our exports amounted to 6,079,606 lbs.

During the year, the following co-operatives have been incorporated under the Ontario Companies Act:—

Co-operative Trading Association of Sudbury, Ltd., Sudbury.
Markdale Farmers' Co-operative, Ltd., Markdale.
Ontario Onion Growers' Co-operative, Ltd., Chatham.
The Union Co-operative Store of Ansonville, Ltd., Ansonville.

Chatham Co-operative Credits, Ltd., Chatham.
The Ruthven Growers' Co-operative Association, Ltd., Ruthven.
South Essex Growers' Co-operative Exchange, Leamington.
Denfield Co-operative Garage and Electric Co., Ltd., Denfield.
Harrow Fruit and Vegetable Co-operative, Ltd., Harrow.
St. Catharines Co-operative Egg Grading Station, Ltd., St. Catharines.
Exhibitors Co-operative, Ltd., 314 Yonge Street, Toronto.
Burgessville Fruit Growers' Co-operative, Ltd., Burgessville.
Norfolk Tobacco Growers' Co-operative Co., Ltd., Tillsonburg.

The latest commodity co-operative marketing organization, the Ontario Onion Growers' Co-operative, Ltd., marketing onions from the three commercial districts of Leamington, Erieau, and Jeannette's Creek, apparently has had a successful year.

The British Market

The Department took advantage of the farmers' marketing tour to Great Britain and Denmark, organized by the Canadian National Railways. Two representatives of the Ontario Department accompanied the party, and a report of their findings has already been published in a bulletin entitled "Ontario Commodities on the British Market, 1928." Details may be found in that publication and it is here only necessary to refer to one or two facts in regard to this important market for Ontario products.

The two outstanding requirements of this market in regard to all commodities are:—

(1) Quality.
(2) Tonnage.

As far as Ontario is concerned, the British market certainly is not a dumping market. The choice of the world's products find their way to this market, and low grade goods from any source stand out as extremely undesirable. Not only is the shipping of low grade likely to result in a loss, but such products colour the reputation of our shipments and demoralize the market for our high class products. Generally speaking, the various commodities which we ship to this market are well received on account of their quality, but extreme care should be exercised by our exporters to maintain a high standard if the market is to be retained.

Of equal importance is the necessity of maintaining the volume of our shipments. Without actually seeing the various important markets over the country, one has difficulty in realizing the magnitude of the consuming power of the British Isles. Food must flow and flow continuously to satisfy its forty-eight million people. The whole machinery of distribution is geared to large and continuous supplies. Trade connections are little disturbed by small and intermittent shipments of any of our products, even if the quality be superior. In considering the British market, therefore a balanced programme of quality and quantity of our exportable farm products is essential.

Community Halls

The establishment of community halls and athletic fields in the rural parts of the Province is assisted through a government grant in conformity with the Community Halls Act of 1920. The number of these establishments in the Province and their usefulness continues to increase from year to year. Each

separate project is inspected and approved by an officer of this branch. Such visits give an opportunity of supplying communities about to undertake the erection of a community hall, the benefit of the experience of other communities where such halls have been established. In all cases a rather high standard is required, and some rural communities are now provided with social centres of great value to the surrounding countryside. To illustrate the wide use made of these halls, and to indicate the part they play in the rural life of the Province, the following list of kinds of meetings held is appended:—Community concerts; church concerts; community dramatic shows; travelling troupe concerts; travelling company dramatic shows; motion picture shows; school fairs; poultry shows; horticultural shows; dances, card parties and similar social affairs; fraternal social banquets; community banquets; sewing circles; agricultural short courses and domestic science courses; teachers' conventions; helping hand club; farmers and other clubs; junior farmers; Junior Institute; Women's Institute meetings, both educational and social; I.O.D.E. meetings; church services, church societies such as mission circle and Epworth League; municipal officers' meetings; political meetings; ratepayers' association meetings; athletic meetings; agricultural meetings and lectures; board of trade; Ploughmen's Associations; Vegetable and Horticultural Society meetings; municipal telephone meetings; literary societies; debates; scout troops and bazaars.

Grants have been paid toward community halls and athletic fields during the year as follows:—

Name	Place	Total cost	Grant
Cheapside Community Hall	Cheapside	$3,142 97	$785 75
Stouffville Community Athletic Field	Stouffville	5,585 16	1,396 29
Waldhof Community Hall	Waldhof	6,117 98	1,529 50
Port Stanley Community Hall	Port Stanley	9,868 00	2,000 00
Stirling Community Service Building	Stirling	13,485 75	2,000 00
North Gwillimbury Twp. Community Hall	Belhaven	8,800 00	2,000 00
Gore Bay Community Hall	Gore Bay	15,327 85	2,000 00
Brownsville Community Athletic Field	Brownsville	4,383 88	1,095 97
Lobo Continuation School and Community Hall	Coldstream	6,548 00	1,637 00
Erindale Community Hall	Erindale	8,013 00	2,000 00

Weed Control Act

A weed control act has been in the Statute books of the Province for over thirty years. This Act provided that a municipality "*may* appoint weed inspectors," with the general result that the Act was of practically no benefit in controlling the weed menace. The prevalence of many serious weeds and the economic loss therefrom continued to grow, until some definite action became imperative. The original Act was therefore altered a year ago in the following particulars:—

1. The appointment of a Weed Inspector or inspectors was made compulsory in every municipality (city, town, village and township) in the Province.

2. The Minister of Agriculture was empowered to appoint and fix the remuneration of an inspector in any municipality failing to appoint; such remuneration to be paid by the municipality.

3. The list of noxious weeds was amended.

4. The duty of cutting weeds on roads was placed directly on the road authority, the penalty of non-compliance being the withholding of the road grant from the municipality.

5. Suitable regulations for the better enforcement of the Act were adopted.

Due to the lateness of the season when the amendment came into force, during the first year of the amended Act, no definite action was taken by the government. In the spring of 1928, however, the director of this branch was named to administer the Act and definite steps were taken to acquaint all concerned with the provisions of the Act and its enforcement. The first year's work has been largely one of education, and of enlisting the co-operation of the municipal authorities, weed inspectors, and property owners. In this connection, the following are some of the steps taken:—

1. A letter from the Minister went to all municipalities in the Province calling attention to the Act and its requirements, so that no municipality was without full knowledge that the appointment of an inspector was compulsory.

2. A series of meetings for the weed inspectors and councillors was held over Old Ontario, arranged in such a way that every weed inspector could attend. At these meetings the Act and regulations and their interpretation were fully discussed and explained. Many special problems of weed inspectors were brought up and a clear understanding arrived at as to enforcing the regulations. Another important phase of these meetings was a full discussion of the weeds named in the Act and methods of control. These meetings brought excellent results, and it is suggested that municipalities require that their weed inspectors attend such meetings in the future.

3. The Provincial Highways Department was requested to ask its road engineers over the Province to give particular attention to the cutting of weeds. Other public bodies, such as the railroads and T. & N.O. Commission, also co-operated fully.

4. During the season all county and township councils were again notified as to the cutting of weeds on highways.

5. Various methods of publicity were used in all sections of the Province to arouse the interest and co-operation of all concerned. These included articles in the local papers by agricultural representatives, editorials, public notices by municipal authorities, weed inspectors' notices, broadcasts on the radio and special weed meetings.

6. The provincial officer, in travelling over the Province during the summer, came in personal contact with weed inspectors, reeves and clerks of municipalities, road supervisors, and other officials having some interest in the problem. Through correspondence, also, special problems were met.

The results of the first years' work are very encouraging, and indicate that a real effort is being made to control the situation. It is clearly evident that more weed cutting was practiced in 1928 than for many years previous. An encouraging feature is the fact that from many sources come the request for a more strict enforcement of the Act. More especially in the sow thistle areas, real and well-founded concern is evident in the extensive campaigns being planned against this weed.

The inspectors were requested this year to pay particular attention to (a) fence lines, fence corners, and other waste places, and (b) roadsides. With

regard to the first, we find the inspectors had very little trouble, owners of property generally being very willing to clean up. In many of the towns and villages vacant lots are a weed menace to surrounding farm lands and though these have not been kept as clean as could be desired, yet some municipalities have spent considerable sums in cutting vacant lots and waste places. It is anticipated that the improvement in this regard will be very marked in future.

As to the roads, the results may be summed up as follows:—The provincial roads generally were well kept; the county roads were kept in fair shape; and the township roads varied all the way from no action to excellent work.

On many roads the cost of cutting weeds is high due to rough, stony and generally dirty roadsides. Reports show that when such roadsides are cleaned up and kept cut for two or three years, the cost of keeping the roadsides clean is brought within a very reasonable amount. The inspectors have been requested to require the road authorities to do a reasonable amount of cleaning up on such roads each year, so that in a few years the Province may be free of this too prevalent source for the spread of weeds.

The results of the enforcement of the Act this year have brought home to the municipalities the necessity of definite and constructive action. A number of municipalities were found making some show of living up to the letter of the law, but were somewhat lax in real accomplishment. It is evident, however, that the educational work carried on has laid the foundation for a more strict compliance with the provisions of the Act, and that the marked improvement shown this year will continue.

AGRICULTURAL DEVELOPMENT BOARD

Another satisfactory year may be reported on behalf of the Agricultural Development Board regarding long and short term loans to farmers. The following comparative statement indicates the steady increase in the volume of loans made by the Board.

	Number of applications passed	Amount of loans passed	Value of security	Number of loans paid out	Amount paid out
1922.....	458	$2,040,605 00	$4,693,304 00	334	$1,188,000 00
1923.....	953	3,729,350 00	8,685,166 00	776	3,000,000 00
1924.....	990	3,582,150 00	7,871,026 25	819	3,200,000 00
1925.....	892	3,246,680 00	7,197,300 00	701	2,700,000 00
1926.....	1,119	4,028,300 00	9,089,008 57	831	3,200,000 00
1927.....	1,275	5,043,995 00	11,298,263 50	1,001	4,100,000 00
1928.....	1,567	5,670,025 00	13,903,576 17	1,132	5,000,000 00
	7,254	$27,341,105 00	$62,737,644 49	5,594	$22,388,000 00

The fact that money has been made available to farmers for mortgage purposes at 5½ per cent. has been increasingly appreciated, as reflected in the number of loans applied for, and this results in a great saving to the farmers all over the Province.

Satisfactory collections have been maintained. Less than 1.5 per cent. of payments due for more than a year were outstanding at the close of the last fiscal year, and payments due within the year are being well taken care of, serious losses have been avoided in disposing of the new farms which came into the possession of the Board. The Board has followed the practice of paying over to the borrower or creditors every surplus secured through the sale of any property.

Short Term Loans

No new associations have been formed. In these associations no new loans were made to six of the associations. During the year principal to the extent of $37,848.50 was repaid by borrowers of the various associations. In addition to payment of most of the interest, new loans were issued to the total of $34,775. The total amount of loans outstanding was $144,393.33 as compared with $147,466.83 a year ago.

The Board have again submitted a very satisfactory financial statement for the year, the operating surplus for the year being $109,617.59. The Board has repaid the Provincial Treasurer revenue in excess of all moneys expended since the date of its inception, and at the same time having increased its surplus account from $113,176.72 to $193,289.15. It is advisable to build up the surplus account of the Board as the volume of its business increases.

KEMPTVILLE AGRICULTURAL SCHOOL

The Kemptville Agricultural School had its most successful year during the 1927-28 season. The student attendance was greater than in any previous year; the interest in the school farm was maintained; while the increased interest in the institution was manifest in the inquiries of Eastern Ontario farmers and the increased requests for assistance from our staff at public meetings throughout the territory served by the school.

The attendance in the regular classes was as follows:—

Agriculture—Senior Year	18
Junior Year	27
Domestic Science	17

The attendance at the short courses was as follows:—

Agriculture	50
Teachers' Summer Course	45

As in former years, the school was privileged to entertain a number of of organizations and groups. The following paid visits during the past year:—

Name of Ogranization	Number in attendance (approximately)
Girls' Conference	85
Junior Farmers' Conference	50
Junior Farmers' Field Day	3,000
Eastern Ontario Trustees and Ratepayers	150
Teachers' Association	300
Annual Reunion ex-students	200
Grenville County Community Club	200

During the year an addition, sufficient to accommodate thirty-two agricultural students, was added to our students' residence. A house located on the campus was altered and remodelled for a member of the staff, while a new dairy barn was erected. Considerable work has been done during the past year in improving the addition which is being made to the campus.

During the past year, Mr. E. K. Hampson resigned to accept a position with a prominent commercial concern. His work here in field husbandry was greatly appreciated. His place, however, has been now filled by Mr. H. W. Graham, who had formerly been temporarily employed on our staff. The school was also fortunate in securing Mr. G. Collins as instructor in English and economics. There were two resignations from the domestic science staff: Miss M. Thompson, instructor in cooking, who is taking post-graduate work in New York, and Miss Irene Syme, instructor in home nursing and first aid. Both these positions have been satisfactorily filled, Miss M. Langstaff having charge of cooking and dietetics, and Miss M. Perdue instructing in home nursing, first aid, and physiology.

The school held its first auction sale of live stock in September, disposing of one Ayrshire bull calf, four Holstein bull calves, twenty-two bred sows, five young boars, and seven ram lambs. Another sale will be held next year, but probably nearer spring. A very promising Holstein bull was purchased early in the year.

Field Husbandry

Generally speaking, the farm crops were excellent. Soil fertility is being maintained and weeds kept under control by a crop rotation and also by after-harvest cultivation. Many of our most persistent weeds, such as twitch grass, are being reduced by this method. After-harvest cultivation, if carried on

under favourable conditions of heat and dryness, is proving a most effective means of destruction to weeds, and, at the same time, makes it possible to obtain a remunerative crop the same year. The more general use of this practice is advisable.

Barley yields were high, the school harvesting 8½ acres which made an average yield of 61½ bushels per acre of the O.A.C. No. 21 variety. This is proving an exceptionally good variety. In conjunction with the Botany Department, Ontario Agricultural College, experiments were carried out with different treatments for smut. The hot water treatment proved 100 per cent. effective, while the formalin treatment proved fairly so. This experiment will continue this year.

The oat, potato, and root crops gave very satisfactory yields, especially potatoes. Off 3½ acres, 1,300 bushels were harvested of the Irish Cobbler variety. About half of these potatoes were grown for certified seed and they have successfully passed the field inspection.

Sweet clover, as usual, is giving excellent results, being very economical from the standpoint of production and cost.

The new seedings of alfalfa and sweet clover were showing an excellent stand after their nurse crops were harvested, and gave at that time every indication of good prospects.

Farmers are making good use of the seed cleaning plant, and the amounts of grain cleaned are comparing very favourably with other years in spite of the fact that the number of plants are increasing.

The amounts cleaned and graded at the school establishment, were as follows:—

Cereals	5,695 bushels
Sweet clover	83 tons
Timothy	40 tons
Other small seeds	68 bushels

Two hundred and sixty-six farmers availed themselves of the service offered. A sufficient charge is imposed to cover the cost of the work.

Horticulture

Instruction in horticulture in connection with the school course consists of lectures and practical instruction in pomology, vegetable gardening, and floriculture.

The winter and spring seasons during which the school is in session, precludes the possibility of giving practical instruction in many important phases of orchard and garden practice. Practical work is carried on as far as possible in the small greenhouse. This green house (30′ x 15′) met the requirements of the earlier and smaller classes, but present conditions are such that the practical work is seriously handicapped by the condition caused by larger classes of students. A second greenhouse similar to the present one, would permit of better and more extensive practical instruction in horticulture, and, at the same time, very materially benefit the practical work in both botany and entomology, which subjects are, at present, a branch of the work of this department.

The spray service initiated a year ago by the agricultural representative of Grenville County and the horticultural department of the school to supply information to fruit growers of the county, was continued and was appreciated by a number of growers. The great variation in weather conditions at the time of apple blossoming, a repetition of conditions experienced the previous spring,

necessitated the application of an extra spray. A promising display of bloom on all varieties developed in the school orchards. Several warm days when the Wealthy were in full boom changed rapidly to cold and wet weather, and this change probably was the cause of a light set of fruit on the later varieties, including MacIntosh and Fameuse. The Wealthy crop was particularly heavy, which necessitated thinning the fruit on nearly all trees of this variety.

During the year a number of lectures on horticultural subjects were given at short courses and to several societies and organizations.

The general supervision of the forestry nursery is under this department, and the increasing demand for seedling trees for the purposes of reforestation indicates that means must be taken in the near future to establish a nursery on a more extensive scale to meet the demands in this part of the province.

A profound and lasting benefit to agriculture in general will result by encouraging the desire on the part of many farmers to improve the general appearance of their farm homes by the planting of trees and ornamental shrubbery. With this in view, a request was formerly made, and is again repeated, that a small appropriation be made available for assisting those who desire to beautify their farm home surroundings. There are a number of individuals who are most desirous of so doing, but through lack of knowledge of suitable and hardy material to employ, or owing to pressure of spring work, and shortage of labour, have refrained from carrying forward any such scheme.

A small appropriation that would cover the cost of maintaining a limited quantity of suitable material on hand, and pay the services of trained help to do the necessary planting, would permit the development of two or three such farm homes in a definite area, county, or township, that would serve as examples for others to follow as occasion permitted. The money thus spent would be repaid within a reasonable time by the person on whose property the work had been undertaken. There is an urgent need that this line of work be developed, and the services of men familiar with general farm routine and work but possessing besides a reliable knowledge of suitable hard ornamental material, be available to those who required this assistance.

Poultry

The poultry department experienced a very successful season although the lack of range for growing stock was felt considerably.

Extension work has increased during the last two years until now it is of considerable importance. The department was called upon to furnish a speaker for thirty-seven meetings at which there was a total attendance of 1,664 persons. At these meetings, talks were given on seasonable poultry topics. Poultry culling demonstrations were held on thirty-three farms and 1,715 birds handled.

Another feature of extension work which required considerable time was visiting the farmers who were having trouble. Twenty separate farms were visited in connection with disease and nutritional problems.

Farm Mechanics

In connection with the work in the department of farm mechanics, in addition to regular lectures on various phases of the work, the students did practical work by wiring the new 82 ft. poultry house for electricity, each pen being fitted with a separate switch and two lights.

Several range hoppers were also constructed for the poultry plant.

During the year, a new three-legged steel flag pole 80 feet high was constructed and erected by the students. This was set into a concrete base which also serves as a stand for a war trophy. This is a welcome addition to our campus, as heretofore we had no means of displaying a flag.

During the summer the conditions in Eastern Ontario were such that the demand for services in drainage survey and inspection work was very heavy. Over 3,000,000 feet of drains were planned, several farmer organizations were addressed, as well as township councils, in connection with the passing of the Tile Drainage Act by-laws.

Apiculture

The past year has proven rather discouraging to many beekeepers in this section of the Province, due to the fact that many of the colonies were in a weak condition when weather conditions permitted removal from winter quarters. The colonies were slow in increasing in strength due to wet weather conditions, and were unable to produce light honeys in any large amounts. Many beekeepers didn't extract a pound of light honey.

The school apiary was fairly successful in this respect, as the colonies built up rather quickly, and about 1,200 pounds of light honey were extracted. The apiary consisted of twenty-seven producing colonies from which was taken 3,200 pounds of extracted honey and 300 pounds of comb honey.

During the past year, many inquiries were made regarding bees, and about twenty apiaries were visited and instructions given. Disease is very prevalent in this section, and control measures must be enforced if the disease is to be prevented from spreading.

The local honey market has not been very active, and the price secured by the beekeeper has only been about ten to twelve cents per pound for light, and eight to ten for dark honeys. This has caused many smaller beekeepers to neglect their apiary work, resulting in a deterioration of the colonies and producing excellent conditions for the development and spread of disease.

WESTERN ONTARIO EXPERIMENTAL FARM

Operation was difficult throughout the year because of marked seasonal fluctuations; the spring was cool and backward with too many heavy rains and thunderstorms; the early summer was wet but the temperatures were reasonably high; the late summer and early fall were dry. During August and September there were several small showers that were of no effect in so far as practical operations were concerned.

While the above is true for the Ridgetown area, there were districts within short distances where the situation was entirely different. Fall wheat suffered for moisture here and west of London sowing was difficult because of excessive rain.

Frost caught some of the tobacco but generally the damage was light.

Rainfall by months during the growing season:—

April	2.3	inches
May	2.38	"
June	4.42	"
July	5.73	"
August	1.27	"
September	.98	"
October	2.38	"
	19.46	"

A thunderstorm on July 4th, when 2.1 inches fell in a short time, did much damage in this district.

Farm Crops

The cereal crops were only fair. Part of the wheat suffered from winter killing; this was pronounced on oat and barley stubble whereas on the bean land no damage whatever was noted. However, the wheat was a good sample throughout.

The oats (O.A.C. No. 144) were very heavy and completely flattened by the large rain in July and yielded very poorly. The Banner oats on the gravelly land yielded sixty bushels per acre but stood up well.

The barley was light but a good sample.

The beans were a satisfactory crop. Some were drowned in July and even on the best drained land there was a remarkable difference between the crop immediately over the drains and midway between them.

Hay was an excellent crop but the wet weather during the harvest of the first cutting of alfalfa spoiled it to some extent.

Wheat—Red Rock, 4.5 acres—180 bushels; 40 bushels per acre.
Imperial Amber, 4 acres—145 bushels; 36¼ bushels per acre.
Dawson's Golden Chaff, 13 acres—377 bushels; 29 bushels per acre.
Junior No. 6, 12 acres—384 bushels; 32 bushels per acre.
Beans—Michigan Robust, 26 acres—722 bushels; 27 bushels per acre.

The tobacco was a three-quarter crop. Root rot did damage in some places and yellowing effected some. The quality was good and is curing well in the barn. Five acres were grown.

Sufficient corn for silage and experimental purposes only was planted. The borer did some damage but was much less than during 1927.

The potato crop was excellent—two carloads were shipped and approximately 175 bags are in pits.

Seed

The demand for seed is far beyond our supply. Wheat was sold throughout the country from Glencoe to Essex. Oats and barley are in greater demand than in previous years. The beans were sold long before they were threshed and only about one-third of the demand was filled.

Swine

During the fall of 1927 and the winter of 1927-28 some worm trouble developed in the pigs. All brood sows were treated with Harco capsules, their udders disinfected and were placed in thoroughly disinfected pens, which were put on soil, where pigs had not been previously reared. Without exception no trouble developed. All pens and platforms are disinfected carefully.

Over one hundred spring pigs were reared and did remarkably well. Forty sows were available for sale as breeders and some were disposed of early at $20 to $30 each. The demand was satisfactory until the market broke and for six weeks not a single inquiry was received. Between twenty-five and thirty sows were sold on the market in the regular way

Three breeds, Yorkshires, Berkshires and Tamworths were kept but the Tamworths have been disposed of and more attention will be given to the other two breeds. The lack of demand for Tamworths was responsible for this change.

It will be necessary to have two Berkshire boars as well as two Yorkshires.

Poultry

With the addition of a new laying house, which will accommodate about 200 birds, it has become possible to make a start along the lines of poultry development. During the season of 1927-28 trap nests were used with all pullets. With the aid of the records of the early season performance of these birds, suitable breeding pens were selected and mated with pedigreed male birds provided by the poultry department of the Ontario Agricultural College. As many eggs were set as possible to secure after strict selection and during the desirable part of the hatching season. Good hatches resulted and a lot of valuable pullets and cockerels were raised. The stock of this year shows very desirable characteristics and will, no doubt, prove invaluable as foundation stock of known parentage for future development work along breeding lines.

A keen demand exists in the spring of the year amongst farmers for the purchase of the Experimental Farm hatching eggs. No sales may be made from our limited supply until after the end of our own hatching season.

In the fall of 1928 all desirable cockerels worthy to be sent out as breeding stock were bought up comparatively early in the season. In all, ninety-eight were sold for this purpose and many inquiries were received after the supply was exhausted. It would appear that in future the Farm will become a centre for the distribution of poultry breeding stock for the southern Ontario counties.

Cattle

A carload of steers have been fed each winter so that the roughage might be disposed of and the straw tramped down. Previously the cattle were purchased after November 1st but for the past two years the cattle were very scarce and prices high for very ordinary steers. In September, 1928, a carload of twenty-six were purchased at $10.50 per cwt. The market has fallen 1½ to 2 cents

per pound, and unless markets change, there will be no profit. However, the quality of the cattle on hand is excellent, which will be of value when they are ready for sale.

Permanent Improvements

Very little was undertaken in 1928.

An improved outlet was established for the western portion of the farm during 1927. Instead of carrying the drainage from the Agricultural School, the ridge and the muck lands north through the farm a cutoff outlet 650 feet long was put in, which will give quicker drainage.

The balance of the drain on the easterly side and immediately in front of the barns was cleaned. This was forced under the Drainage Act but was very necessary.

A new top was put on the silo.

The foundation of the house was improved by building in new cement parts and some of the brickwork was chinked.

One movable brooder house and four swine colony houses were built.

A plantation of 125 Black Walnut trees was planted on the small piece of isolated waste land at the northeastern part of the farm, and one of 100 Chinese Chestnut trees around the apiary. Approximately three acres near the driveway were seeded to grass to be used for playgrounds and for parties coming to the Farm in the summer months. Previously these parties went to the town playground and but few looked over the Farm.

General Conditions

The sugar beet crop was below the average; the wet weather in June and July made it difficult to thin and cultivate and leaf spot and girth gall developed while around Wallaceburg hundreds of acres were completely destroyed. The dry weather in August and September resulted in a drying up of the tops and the small yields generally resulted. The value of thorough drainage, coupled with good farm practices, were demonstrated very clearly in the beet area. Unfavourable weather conditions and low sugar prices will make this season an unsatisfactory one for the producers.

The potato situation has been difficult; the extremely large crop throughout America and the opportunity afforded the Americans to invade our markets with the clean up of their crops make the production of potatoes for the summer markets a hazardous job. Except for the above, the growers are accepting the situation as one of overproduction, which is bound to result in low prices. The general crop was excellent.

The tobacco situation is most difficult. The spirit of speculation is altogether too prevalent in the older growing districts—it is always present in the new. There are too many growers in the spring of each year calculating definite returns and undertaking obligations upon the strength of the forecasts. Burley tobacco is consumed in Canada and evidently there is a surplus, and under such conditions the market is bound to be weak and erratic. Burley growers should reduce the acreage and concentrate on quality. New and careless growers are the greatest sufferers, consequently from them come the most insistent and loudest complaints.

The system of purchase may be open to question but the market values and ease of sale of all agricultural products depend largely upon supply and demand. The Flu tobacco of good quality moved readily at a fair price as did

the Burley grown upon the best Burley soils. The growers of quality dark fired tobacco have not experienced the same difficulty due to an export demand.

Agriculture, upon soils other than those suited to the production of the Flu types, to be successful, must revert to a more balanced production; cash crops are excellent in their place but in such sections their position should be as a strong side line with live stock and general crops holding the major place. Winter dairying would be of inestimable value to large numbers.

Definite efforts were put forth to organize the tobacco growers into a pool for sale purposes but nothing concrete materialized, except that definite information regarding the requirements of the various markets became known to all growers. Under existing circumstances the formation of a pool is far in the future.

Except on very light or well drained lands, beans suffered considerably from the severe thunderstorms during July; some were drowned and, in many cases, they were partially damaged and disease was too prevalent. On the Experimental Farm considerable damage was done even in the best drained field and on the later drained where the land was heavier the beans were destroyed. The very excellent harvest weather compensated many for losses sustained earlier in the season; only a small percentage of the crop had to be either machine or hand picked. The exceptional market and the keen demand has aroused much interest and speculation regarding the crop for 1929 and the demand for seed has kept pace with the situation. As yet no foreign beans are upon the market, which is unusual, and should such offerings be short the prospect for the early market in 1929 should be good because there will be no old stock available.

The movement for corn borer control has been carried on successfully; the co-operation of the growers with the Department has been excellent and the diminishing of the ravages has been sufficient to encourage closer co-operation next year. The corn acreage as compared with 1927 was doubled. Undoubtedly the method employed by the Department, first, in the educational work, and secondly, by endeavouring to meet all objections fairly has made a definite and favourable impression.

EXTENSION

The extension work in tobacco culture during 1928 was undertaken altogether by Mr. White. He attended the short courses at Welland, Wallacetown, Merlin and Raleigh township hall. Meetings were attended at Strathburn, Alvinston and London. During the season trips were made among the new growers in Middlesex and Elgin.

Three and one-half acres of Flue tobacco were grown in Norfolk County upon the Provincial Turkey Farm. Mr. White supervised and assisted with the work except part of the stripping. Many trips were also made upon request.

The vocational school has an attendance of seventy-seven in the three classes. The interest among farmers seems to be increasing and there is every promise of one hundred students when the four-year classes are all in, which will be in the fall of 1929. These students are all drawn from the Ridgetown High School area. A carpenter shop was fitted up in one end of the old barn on the Experimental Farm.

Ten Ton or Better Tomato Club

This work was commenced in 1927 in co-operation with Libby, McNeill and Libby of Canada, Limited, at Chatham. The success of the original effort was so satisfactory to both the growers and the company that we determined to make it a still greater success in 1928. In 1927 only twenty (20) per cent. of the contract tomato growers of Libby's signed as club members. In 1928 over seventy-five (75) per cent. of the contract growers became club members.

In all, seven letters containing cultural information were sent out to the growers during the period from just prior to sowing the seed and until the harvest was well under way. Club rules and regulations were very much similar to those of 1927, and in later checking up it was very gratifying to learn of the many good growers who had adhered closely to the suggestions made. Thirty-three (33) per cent. of the club members reached the objective or exceeded it, namely ten tons or better of red, ripe fruit per acre. Numbers of members came close enough to the mark to rank as really high class growers.

It was a significant fact that nearly all of the crops classified as excellent and good came from winning club members. In fact, no ten ton winners had any other rating than good or excellent for their crops.

The sum of $465.70 was paid out by Libby's to club members as cash bonuses on all deliveries of tomatoes where ten tons per acre or more of good fruit had been brought in. In addition to this cash bonus, additional prizes of fertilizer totalling $66.00 in value were divided amongst the owners of the three best yielding crops.

First prize was won by a man who grew 7.43 acres and who delivered sufficient tomatoes to make him an average yield of 16.37 tons per acre. This man received a cash bonus on his crop of $60.82 and in addition gained a prize of $33.00 worth of fertilizer. His tomatoes gave him a total money return per acre of $266.46. This figure represents one of the best proportional returns possible from cash crops grown in southern Ontario.

The plan of the Ten Ton or Better Tomato Club was suggested to the head offices of two other of the largest users of tomatoes in southern Ontario, but the companies so approached did not feel inclined to adopt the idea.

The Canadian Canners, Ltd., however, asked the co-operation of the Experimental Farm in connection with the growers supplying tomatoes to eight of their factories located in the counties of Essex and Kent. This co-operation was gladly given and took the form of letters dealing with hotbed making, seed sowing, plant growing and preparation of the field soil. Three timely letters were sent out to each of approximately 375 growers. Our only regret was that, owing to the disinclination of the company to take up the Ten Ton Club project, we could not justify a close follow-up such as has worked so well in other cases.

Summary of Plant Disease Work in Ridgetown District

A summary of experiments for the control of plant diseases is given below. Some of these experiments were on the Experimental Farm, others in the district where some particular crop was grown.

Wheat Smut. Wheat having a large percentage of stinking smut (bunt) was purchased in Sept. 1927 and treated in the following methods: (1) Dipping

in a formalin solution (1 pint to 40 gallons water) for 5 minutes and covering for 3 to 4 hours. (2) Sprinkling with a formalin solution (1 pint to 40 gallons water) and covering for 3 to 4 hours. (3) Dusting with copper carbonate. (3 oz. per bushel). The plots were examined before harvesting and results as follows:— Formalin dip, no smut; formalin sprinkle, trace; copper carbonate dust, trace; no treatment, 13.5 per cent. smut.

Oat Smut. Two plots of Hulless oats were sown. The oats for one plot were treated with copper carbonate dust and the oats for the other plot were sown untreated. The treated oats had only a trace of smut whereas the untreated had 10.5 per cent. smut.

Beans. An experiment carried on during previous years for the control of mosaic and anthracnose was continued. Three different strains of field beans were grown and these were rogued for mosaic twice during the growing season. The first strain (New York State) had an average of 6 plants per 100 rd. rows. Second (Michigan State) an average of 2.6 plants, and third (Wisconsin State) an average of 1.3 plants, and these were only slightly affected. Just before harvesting the plants (pods) were examined for anthracnose. The first strain had 4.5 per cent., the second 3.5 per cent., and the third 3.8 per cent.

Celery Blight. Three different experiments were started for the purpose of comparing the results of spraying with liquid bordeaux and dusting with Copo dust. After several sprayings two of these experiments were discontinued as no blight developed either on the sprayed or unsprayed. In the third experiment some blight developed before spraying was started. Ten sprayings were given to part of the experiment and twelve dustings to the other part and a third part left as a check. The spraying gave a little better control than the dusting. Plants developed about the same but the stems on the dusted plants were slightly disfigured with blight and hence not as good for market. The plants in the check plot were of little or no value as the plants were small and the stems were badly disfigured with blight.

Onion Smut. The work of the previous year in the Pelee onion marshes was continued to determine the best strength of formalin to use for the control of smut. The solution giving the best results was 1 pint of formalin to 15 gallons of water and used at the rate of 150 gallons per acre. This gave a yield of 328 bushels per acre, whereas on the untreated part the yield was only 45 bushels per acre. Two other solutions gave nearly as good results: 1 pint to 10 gallons and 100 gallons per acre and 1 pint to 15 gallons and 200 gallons per acre. When more than 200 gallons were applied per acre there was a reduction in yield. Semesan was also tried but results rather poor. As the onion crop in southwestern Ontario was very light this year, the yields from all the plots were much below the average.

Potatoes. An experiment was conducted to see the effect of dusting and spraying on late potatoes—3 plots of Dooley potatoes were planted on June 15th. Plot No. 1—five applications of dust were given at intervals of 10 days to two weeks. Plot No. 2—four applications of liquid Bordeaux were given at intervals of ten days to two weeks. Plot No. 3—no spraying or dusting was given except to control potato beetles, calcium arsenate being used. The tops in this lot died down early in the fall with late blight. Plot No. 1 yielded at the rate of 255.5 bushels per acre. Plot No. 2 at the rate of 291.0 bushels per acre and Plot No. 3 at the rate of 194.5 bushels per acre and the potatoes were lacking in uniformity.

Raspberries. Leaf curl, mosaic and anthracnose have become so serious in the growing of raspberries in southwestern Ontario that an effort has been made for the past three years to locate plantations fit for certified stock but so far only one plantation in the district has been suitable for the purpose.

Apple Spraying. During the apple spraying season, circular letters were sent out to the apple growers in Essex and Kent. This work was carried on in connection with the agricultural representatives in these counties. Personal visits were made as often as possible especially to those asking for assistance.

Greenhouse growers were visited from time to time and the diseases of greenhouse crops discussed as well as methods of soil sterilization. Numerous enquiries were received during the season as to the control of certain crop diseases and insects.

The plant disease work in the Ridgetown area has been carefully attended to by D. R. Sands, of the O.A.C. This is an excellent arrangement; it permits the Department of Botany to keep closely in touch with the practical and it gives time for looking after the intensive agriculture in this area.

Weeds

During 1927 some experiments were undertaken, using refuse oil, salt and pig pasturing for extermination of field bindweed.

The salt killed the plants completely but some stragglers were still growing on the oil plot; one additional application would in all probability have killed all the plants. Pasturing with pigs was successful.

Any of the above methods may be utilized where field bindweed first appears in small patches.

Soy Bean Hay

Soy beans have been recommended as a suitable catch hay crop as well as for a bean crop.

Experiments and experience have proved Soy beans produce a soft pork which is very objectionable and so long as they are grown for a grain crop they are a menace to the hog industry in southwestern Ontario.

As a hay crop, they will produce an abundance of very excellent and palatable hay, which is relished by horses, cattle and sheep.

The beans on the farm were cut at two stages; first, before any leaves turned yellow but the pods and beans were formed; second, a week later.

Some were bunched and the balance cured in the swath. In both cases the hay cured in beautiful shape.

The difficulty lies in the length of time required to cure the crop. The weather this year was ideal and three weeks were necessary and had a large quantity been placed in a mow, more time would have been required.

Undoubtedly a crop such as was grown for hay would have been excellent as green manure because it is a legume and because of the amount produced per acre.

EARLY CABBAGE, 1928

Application	Heads	Rough weight lbs.	Trimmed weight lbs.	Trimmed weight per acre lbs.	Increase over one application lbs.	Nitrate of Soda vs. Sulphate of Ammonia
Nitrate of Soda: 1 application..	30	130	69½	22,425	.....	—967
Nitrate of Soda: 2 applications.	30	145½	74½	24,038	1,613	—2,097
Nitrate of Soda: 3 applications.	30	169	85½	27,587	5,162	+2.258
Sulphate of Ammonia: 1 application..	30	138	72½	23,392		
Sulphate of Ammonia: 2 applications.	30	152	81	26,135	2,743	
Sulphate of Ammonia: 3 applications.	30	145½	78½	25,329	1,937	
					Increase over check	
Nitrogen Phosphorus Potash.....	30	133	70	22,586	+1,452	
Nitrogen Potash	30	133	74½	24,038	+2,904	
Nitrogen Phosphorus.....	30	134	72	23,221	+2,087	
Nitrogen: 2 applications.	30	128½	65½	21,134		

Variety of Cabbage—Golden Acre.

Planted out May 4th—harvested July 2nd—plants set in field 18 inches by 36 inches.

Nitrate of soda and sulphate of ammonia were applied at equal weights, the rate being 200 pounds per acre. The lots receiving the above two materials received no phosphorus or potash.

Acid phosphate 16 per cent. was used at the rate of 800 pounds per acre.

Muriate of potash was used at the rate of 400 pounds per acre.

Nitrogen was supplied in the complete fertilizer through two applications of nitrate of soda at 200 pounds per acre.

First application of nitrogenous fertilizer was made May 4th, second May 30th, third June 12th. One treatment with corrosive sublimate solution was made.

A VARIETY TEST OF SOME FORCING TOMATOES UNDER GLASS

Variety	Number of fruits	Number of plants	Yield per block		Average size of fruits	Yield per plant	
			lbs.	ozs.	ozs.	lbs.	ozs.
Grand Rapids—our own selection outdoor grown seed 1927	1,669	60	257	10	2.4	4	4
Edmunds' No. 2.....	410	13	59	12	2.3	4	9
Vineland Station Veals X Grand Rapids.....	1,807	60	248	5	2.15	4	2
Kondine Red.....	1,045	26	141	8	2.16	5	4
Edmunds' No. 1.....	1,122	36	165	0	2.2	4	9
Bonny Best.....	1,392	60	284	0	3.2	4	12

Kondine Red appeared in this test to be the heaviest yielding variety. However, in the same house were grown other lots than those recorded above of Veals X Grand Rapids and of Grand Rapids Forcing, which slightly exceeded the yield per plant, reached by Kondine Red Kondine Red is a very free setting type. Yields, from the above tests, with all varieties, were secured without resort to hand pollination. Tapping the supporting wires was done twice daily throughout the blossoming period.

EFFECT OF PLANTING DISTANCES UPON SIZE AND YIELD OF INDOOR TOMATOES

Row	Number of fruits	Number of plants	Yield from each block		Average size of fruit	Yield per plant	
			lbs.	ozs.	ozs.	lbs.	ozs.
1, 2 and 3	2,498	90	392	0	2.5	4	5
4 and 5	1,815	60	294	8	2.6	4	14
6, 7 and 8	2,491	90	392	10	2.5	4	6

All plants were set 18 inches apart in the row.

In rows 1, 2 and 3 and 6, 7, 8 the rows were spaced twelve inches apart with a twenty-four-inch path between them and the next group on either side. Each plant in this case occupied two square feet of bed space. One-half of the distance between the outside rows to the next group is considered in arriving at this figure.

In rows 4 and 5 there were twelve inches separating the rows while on either side was a twenty-four-inch path. Each plant in this group then occupied 2.25 square feet.

As will be seen from a glance at the table, the average size of the fruit from the rows 4 and 5 was slightly larger than from the plants of the other rows. Also the yield per plant was 8½ ounces greater than the average yield per plant from the other two plots.

OUTDOOR EARLY TOMATOES—1928

A test of certain varieties of tomatoes for early and second early markets.

Variety	Yield per acre July 19—31		Yield per acre August—10		Total Yield per acre		Yield per plant July 19—Aug.10	
	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
Avon Early (Steele-Briggs)	127	9	4,721	13	4,849	6	1	12½
Fargo	170	2	8,337	10	8,507	12	3	2
*Red River A	47	13	12,474	9	12,522	6	4	9½
Viking	180	12	7,082	12	7,263	8	2	10½
Earliana (Moore)	202	1	5,306	12	5,508	13	2	0
Canadian (Harris)	127	9	5,732	2	5,859	11	2	2½
Avon Early (Dreer)	158	13	4,628	4	4,787	1	1	12
Alpha	255	3	2,212	0	2,467	3	..	15¾
*Red River B	42	8	4,977	1	5,019	9	1	13½
Earliana (Harris)	170	2	6,040	9	6,210	11	2	4½
Adirondack (Langdon's)	85	1	5,721	8	5,806	9	2	2
Early Stone	21	4	1,297	7	1,318	11	..	7¾

*Red River A. was from seed supplied direct from the originator at North Dakota Agricultural College.

Red River B. was from seed of the variety secured from an American seed house.

Fargo, Red River A. and Viking were all heavy croppers but of large rough fruit, unfit for market. Of these three, all new varieties, Viking was the most at fault. The seasonal conditions at the time of fruit setting were very unfavourable and, no doubt, contributed to a large extent to the extreme roughness of the fruit, However, from the behaviour of other sorts under similar conditions, part of the trouble must have been constitutional.

Red River B. was more uniformly smooth than Red River A.

Avon Early (Dreer) and Alpha were the varieties which produced the uniformly smooth fruit.

Langdon's Earliana of the Earliana strains gave the highest percentage of unmarketable fruit.

Outdoor Early Tomatoes

Influence of Date of Planting of Seed on Production of Early Fruit

Date on which seed was planted	Yield per acre from July 19 to 30		Yield per acre from August 2 to 15		Total yield per acre from July 19 to August 15	
	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
February 23	563	10	16,505	2	17,068	12
March 1	478	9	16,441	5	16,919	14
March 8	329	11	13,665	11	13,995	6
March 15	26	9	9,752	1	9,778	10
March 22	15	15	10,613	8	10,629	7

Variety used—Canadian—Experimental Farm selection.

Treatment—All lots given standard treatment in growing the plants and set out in field under similar conditions.

Result of Fertilizer Test on Outdoor Tomatoes, 1928

Plot No.	Fertilizer analysis	Yield per acre July 19 to 25		Yield per acre July 26 to Aug. 1		Yield per acre Aug. 2 to 8		Yield per acre Aug. 9 to 15		Total yield per acre	
		lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.	lbs.	ozs.
1	0-16-0	87	8	31	4	4,337	8	8,462	8	12,918	12
2	0-12-4	62	8	200	0	5,875	0	8,662	8	14,800	0
3	0-10-4	100	0	200	0	4,862	8	9,012	8	14,175	0
4	0-8-4	37	8	475	0	5,275	0	6,450	0	12,237	8
5	2-12-4	87	8	300	0	4,375	0	6,587	8	11,350	0
6	2-12-4	37	8	237	8	2,537	8	5,437	8	8,250	0
7	4-12-0	25	0	175	0	4,775	0	7,312	8	12,287	8
8	2-12-0	100	0	150	0	4,500	0	5,275	0	10,025	0
9	2-12-2	.....	.....	118	12	4,000	0	7,100	0	11,218	12
10	2-12-2	87	8	312	8	4,400	0	7,150	0	11,950	0
11	Acid Phos. at 750 lbs. per acre	25	0	218	12	4,425	0	7,650	0	12,318	12
12	Raw Rock Phos	37	8	225	0	3,262	8	8,300	0	11,825	0
13	Basic Phosphate	62	8	56	4	5,400	0	5,525	0	11,043	12
Check	No fertilizer	162	8	212	8	5,637	8	6,737	8	12,750	0

Sulphate of potash was used instead of muriate of potash in plots 6 and 10.

Fertilizer on plots 11 and 12 applied on equal money value and plots 11 and 13 on equal unit basis.

Remainder of experiment 800 pounds per acre.

On account of prevailing weather conditions after the plants were set out in the field, the first two blossom clusters failed to set much if any fruit. Due to this fact and also to the large amount of rainfall in the early growing season, the plants made excessive growth and the check plots, as well as the fertilized plots, were evidently able to draw upon a plentiful food supply.

The plants in the check plot received no fertilizer whatever. No manure has been used in this field for at least three seasons, but the ground is naturally fertile. It can readily be seen that the fertilizer applications hardly had a fair chance to demonstrate their worth under the conditions which existed.

FACTORY TOMATOES

Variety	No. of plants	Yield per plot		Yield per acre	Tons per acre
		lbs.	ozs.	lbs.	
Canadian	30	686	10	62.276	31.13
Early Stone	30	531	6	48.194	24.09
Bonny Best	30	559	14	50.779	25.38
John Baer Can. Canners	30	523	1	46.441	23.22
John Baer Michigan	30	529	6	48.014	24.00
Marglobe	30	359	2	32.561	16.28
Marglobe seed sown March 24th	60	674	5	31.244	15.62
Marglobe seed sown April 2nd	60	661	13	30.648	15.34
Marglobe April 9—one transplanting	60	747	7	34.613	17.30
Marglobe April 9—seed bed	60	762	6	35.300	17.65

Dates of seed sowing—March 24th, 1928.

For all lots except the last three of Marglobe. Date of transplanting in the field: June 4th, 1928.

Dates of harvest period:—
Commenced August 22nd, 1928.
Finished September 24th, 1928.
Number of pickings—8.

Growing the plants:—The seed was sown in flats in the greenhouse and pricked off into 12-inch by 24-inch flats, thirty-five plants to a flat. The second transplanting was made to thirty-two plants per flat. Plants were moved to outdoor frames about June 1st.

The above system applied to all but the Marglobe plots for which the seed was planted April 9th. In this case one lot of seed was sown directly in the soil of a semi-hotbed out-of-doors. The semi-hotbed was constructed of just dry straw (no manure) and soil. The seed was sown in rows and, when the plants were up, they were thinned to stand four inches apart each way.

The other lot of seed sown April 9th was sown indoors and the young seedlings were transplanted 4 inches by 4 inches into the same outdoor bed, as described above. The seed sown directly in the frame-bed was slower in coming up, but by June 14th it was impossible to distinguish between plants of two lots. These plants were much more sturdy and bushy than those grown in the flats and the yields recorded were not unexpected.

Field Culture:—A field of fertile black clay loam, well-drained, was used. The soil was prepared as for a tobacco crop and had been put into excellent tilth. A 4-10-6 fertilizer was used in the hills at the rate of about 500 pounds per acre. The nitrogen used was in the form of sulphate of ammonia and the potash was supplied by sulphate of potash.

Cultivation was frequent and was continued as long as possible without injury to the plant roots being done.

Quality of fruit:—The quality of the fruit in general was good and quite desirable for canning purposes. The one exception to this was that of the variety "Canadian" which produced fruit, a large percentage of which was inclined to be rough. However, enough good fruit is produced and matures early to warrant the use of the variety for part of the planting for a factory crop.

The above test shows very definitely the possibilities in the production of factory tomatoes. Yield and quality can be had provided the soil is good tilth and artificial fertilizer applied. An average of five years will be obtained on this work.

AVAILABLE NITROGEN FERTILIZERS APPLIED TO EARLY POTATOES

An experiment was conducted with early potatoes to attempt to determine the relative values of nitrate of soda and of sulphate of ammonia when applied as side dressings to the growing early potato crop.

The soil in which the experiment was conducted is of a desirable sandy loam type and quite fertile. A crop of rye previously manured was plowed under preceding the potato crop. The standard fertilizer application given all of the Farm's early potato crop was applied with the potato planter at planting time. Planting was done on April 18th.

Nitrate of soda at 250 lbs. per acre, sulphate of ammonia at 250 lbs. per acre were the forms of fertilizer used. The applications were made as side dressings on June 15th. This date was about ten days later than the materials should have been applied. At this time the potato vines all looked strong, healthy and vigorous.

Observations.

Shortly after the applications had been made a difference in colour was plainly visible between all three lots. Each of the treated lots contained six rows, each 124 feet long and each test was in duplicate.

The nitrate of soda plot plants assumed a very dark, deep green colour in foliage.

The sulphate of ammonia plot took a decidedly yellowish shading quite in contrast with its neighbour. The check plot of six rows 124 feet long but not in duplicate, bore a somewhat intermediate colour between the two.

The plot was not harvested until the plants had fully ripened and matured. This was on August 2nd, and the tops were completely dead.

Nitrate of soda at 250 pounds per acre yielded an average for six rows of 12 bags 31½ pounds or 289 bags 23 pounds per acre.

Sulphate of ammonia at 250 pounds per acre yielded an average for six rows of 11 bags 38⅓ pounds, or 267 bags 58 pounds per acre.

The check plot of six rows yielded 11 bags 7⅓ pounds, or 259 bags 57 pounds per acre.

It might be mentioned that only the weight of marketable potatoes was recorded. Furthermore the ground used had had an application of rotted manure before spring preparation commenced. Following the planting of the crop rainfall was very plentiful up until the time when the potatoes were fully mature. Favourable growing conditions with a liberal moisture supply made it possible for the check plot to show up to better advantage.

Fertilizer Test on Corn

The use of artificial fertilizer on corn to hasten ripening has been under discussion since late planting has been suggested in order to evade the corn borer.

A 2-12-6 complete fertilizer was used and plantings were made upon three dates.

The amount of hard corn at husking time was the deciding factor.

The results show that from May 25th planting there was but little difference between the amounts of hard or soft corn obtained where 200, 400 or 600 pounds of fertilizer were used but where no fertilizer was used the amount of soft corn was higher.

From June 2nd planting the soft corn increased considerably in all the plots whereas the total yields did not change much. More advantage for the heavy applications of fertilizer was noted.

From June 15th planting the principal difference is the increased soft corn on all plots but the particularly large increase of soft corn on the plots where no fertilizer was used.

Amount of fertilizer applied (pounds)	Yield per plot		Yield per acre		Total yield per acres, lbs.
	Hard lbs.	Soft lbs.	Hard lbs.	Soft lbs.	
100	97	11½	3,880	460	4,340
No fertilizer	81	12	3,240	480	3,720
100	103	8	4,120	320	4,440
200	228½	17½	4,570	350	4,820
400	229½	15	4,590	300	4,890
600	220	19	4,440	380	4,780
Check	206	25	4,120	500	4,620
200	224	23	4,480	460	4,940
400	211½	23½	4,230	470	4,700
600	208½	22	4,170	440	4,610
Check	187	30½	3,740	610	4,350
Planted June 2nd, 1928					
100	182	33½	3,640	670	4,310
200	185	35	3,700	700	4,400
400	182	36	3,640	720	4,360
600	202	30	4,040	600	4,640
Check	177½	40	3,550	800	4,350
200	190	34	3,800	680	4,480
400	207	32½	4,140	650	4,790
600	211	31	4,220	620	4,840
Check	176½	43	3,530	860	4,390
100	158½	69½	3,170	1,390	4,560
200	158	68½	3,160	1,370	4,530
400	175	62	3,500	1,240	4,740
600	190	59	3,800	1,180	4,980
Check	117	97	2,340	1,940	4,280
200	179½	65½	3,590	1,310	4,900
400	164	67	3,280	1,340	4,620
600	189	40	3,780	800	4,580
Check	121	85	2,420	1,700	4,120

Result of Fertilizer Experiment on Early Potatoes at Experimental Farm, Ridgetown

Plot No.	Fertilizer analysis	Yield per acre	Increase over check per acre	Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer
		bags				
1	0-16-0	161.7	.....	.....	$6 60	.....
2	0-12-4	154	.....	.....	9 45	.....
3	0-10-4	163.3	.....	.....	8 85	.....
4	0-8-4	170.3	.....	.....	8 37	.....
5	0-6-4	165	.....	.....	7 83	.....
6	2-12-4	205.3	28.8	$21 60	12 00	$1 80
7	4-12-4	227.1	50.6	37.95	13.80	2 75
8	6-12-4	264.4	87.9	65.92	15 75	4 18
9	4-8-4	238	61.5	46.12	12 67	3 64
10	2-12-0	224	47.5	35.62	11 17	3 18
11	2-12-2	207.6	31.1	23.32	11 62	2 00
12	2-12-6	208.4	31.9	23 92	12 45	1 92
13	2-12-8	217.7	41.2	30 90	12 90	2 39
14	2-10-4	216.2	39.7	29 77	11 47	2 59
15	2-8-4	188.2	11.7	8 77	10 95	80
16	No fertilizer	176.5	.....	.....	.....	.....

The above test is carried annually to check with work of other years to note the effect of various seasons. A complete fertilizer carrying two per cent. nitrogen has been recommended from the other work.

The nitrogen this year evidently was necessary due to the cold spring.

Result of Fertilizer Experiments on Early Potatoes at Experimental Farm, Ridgetown

To ascertain action of potash on yield. Application in each instance was at the rate of 600 pounds per acre.

Sulphate of Potash was used

Fertilizer analysis	Yield per acre	Increase over check	Value of yield per acre	Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer
	bags	bags				
2-10-4	155.5	9.3	$116 62	$6 97	$11 47	$0 60
2-10-6	197.5	51.3	148 12	38 47	11 88	3 23
2-10-8	186.6	40.4	139 95	30 30	12 33	2 45
2-10-10	188.2	42	141 15	31 50	12 78	2 46
No fertilizer	146.2	.....	109 65	.....	.....	.....

Result of Fertilizer Experiment on Early Potatoes at Experimental Farm, Ridgetown

To ascertain most economical rate of application per acre.

Rate of application per acre	Yield per acre	Increase over check per acre	Value of yield per acre	Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer
	bags	bags				
2-10-4 at 200 lbs	180.4	34.2	$135 30	$25 65	$3 82	$6 71
2-10-4 at 300 lbs	181.2	35	135 90	26 25	5 73	4 58
2-10-4 at 400 lbs	182	35.8	136 50	26 85	7 65	3 50
2-10-4 at 500 lbs	182.7	36.5	137 02	27 37	9 56	2 86
2-10-4 at 600 lbs	165.6	19.4	124 20	14 55	11 47	1 26
No fertilizer	146.2	.....	109 65	.....	.....	.....

The above experiment requires more work—the results during the past three years agree in that the returns per dollar invested in fertilizer are greatest when 200 pounds per acre are used but the total net returns per acre for 1926 and 1927 were greatest when 600 pounds were used. The results over the three shows very little difference and an average over a larger number of years is necessary before definite statements can be made, because a purchase of fertilizer involving 400 pounds per acre means considerable to the fertilizer industry.

Tobacco 1927-1928

Result of topping and suckering experiment on Burley tobacco, 1927.

Method	Weight in lbs. sand leaves	Weight in lbs. good marketable leaf	Weight in lbs. inferior leaf	Total weight in lbs. per acre
Topped and suckered at proper time	373	840	280	1,493
Topped at proper time. Suckers allowed to get big	420	653	303	1,376
Topped when plant is in full flower. Suckers allowed to get big	373	490	350	1,213

Result of Topping and Suckering Experiment on Dark Air Cured Tobacco, 1927

Topped and suckered at proper time	513	933	140	1,586
Topped at proper time. Suckers allowed to get big	420	793	326	1,539
Topped when plant was in flower. Suckers allowed to get big	326	443	466	1,235

Tobacco is one of the crops that require attention at the proper time. Many growers have too large acreages and often the crop is not topped and suckered when it should be. To ascertain the loss, if any, in such cases the work as reported upon was started.

Result of Fertilizer Experiment on Dark Air Cured Tobacco, 1927

Plot No.	Fertilizer Analysis	Yield per acre	Increase over check	Value of increase	Cost of fertilizer	Return for $1 spent in fertilizer
		lbs.	lbs.			
1	2-8-6	1,373	.....	.....	$15 20	.....
2	4-8-6	1,629	.....	.....	17 60	.....
3	6-8-6	1,861	193	$19 30	20 90	$0 91
4	4-6-6	1,692	24	2 40	17 10	14
5	4-10-6	1,822	154	15 40	18 40	83
6	4-8-4	1,618	.....	.....	16 90	.....
7	4-8-8	1,740	72	7 20	18 10	39
8	None	1,668	.....	.....	.....	.....

Result of Fertilizer Experiment on White Burley Tobacco 1927-18

4-8-6 applied at rates of 200, 400, 600, 800 and 1,000 pounds per acre. Station Stand-up Burley used.

Plot No.	Rate on application	Yield per acre	Increase over acre	Value of increase	Cost of fertilizer	Return for $1 spent in fertilizer
		lbs.				
1	200	1,041	.....	.....	$4 40	.....
2	400	1,087	.....	.....	8 80	.....
3	600	1,358	121	$12 10	13 20	$0 91
4	800	1,411	174	17 40	17 60	98
5	1,000	1,431	194	19 40	22 00	88
6	Check	1,237	.....	.....	.....	.....

Undoubtedly the very unfavourable season had much to do with the peculiar results. The plots of White Burley corresponding to the dark air cured plots were ruined with the premature yellowing and mosaic.

RESULT OF FERTILIZER TEST ON FALL WHEAT PLANTED SEPTEMBER, 1927

Fertilizer used and amount	Cost of fertilizer per acre	Variety of wheat	Yield per acre	Value of yield per acre
			bus. lbs.	
Acid Phosphate at 125 lbs. per acre	$1 50	Dawson's Golden Chaff	20 55½	$26 15
Acid Phosphate at 125 lbs. per acre Ammonium Sulphate at 12 lbs. per acre	$1 93	Dawson's Golden Chaff	20 24½	$25 51
Acid Phosphate at 125 lbs. per acre	$1 50	Junior No. 6 New York	28 43	$35 89
Acid Phosphate at 125 lbs. per acre Ammonium Sulphate at 12 lbs. per acre	$1 93	Junior No. 6 New York	31 33	$39 43
2-12-3 commercial mixed at 125 lbs. per acre	$2 48	Junior No. 6 New York	32 25½	$40 53

Acid Phosphate at 125 lbs. per acre is the usual application on fall wheat.

RESULT OF FERTILIZER EXPERIMENT ON BEANS, EXPERIMENTAL FARM, RIDGETOWN, 1928

Plot No.	Fertilizer analysis	Yield per acre	Increase over check per acre	Value of increase	Cost of fertilizer	Return for $1 spent in fertilizer
		bus. lbs.	bus. lbs.			
1	0-16-0	24 45	.....	.....	$1 10	.....
2	0-12-4	26 15	.....	.....	1 57	.....
3	0-10-4	25 30	.....	.....	1 47	.....
4	0-8-4	27 45	1 30	$6 00	1 39	$4 31
5	0-6-4	26 15	.....	.....	1 30	.....
6	2-12-4	25 30	.....	.....	2 00	.....
7	4-12-4	29 15	3 0	12 00	2 30	5 21
8	6-12-4	30 0	3 45	15 00	2 62	5 72
9	4-8-4	28 30	2 15	9 00	2 11	4 26
10	2-12-0	27 0	45	3 00	1 86	1 61
11	2-12-2	27 0	45	3 00	1 93	1 55
12	2-12-6	29 15	3 0	12 00	2 07	5 79
13	2-12-8	27 45	1 30	6 00	2 13	2 81
14	2-10-4	28 30	2 15	9 00	1 91	4 71
15	2-8-4	24 45	.....	.....	1 82	.....
Check.	No fertilizer	26 15	.....	.....	.....	.....

The results from fertilizer upon beans have varied so greatly that definite conclusions are impossible. It would, however, seem that a mixed fertilizer carrying two per cent. nitrogen, ten to twelve per cent. phosphoric acid and about four per cent. potash might come near the proper mixture. As in early potatoes, the nitrogen would serve as an insurance against unfavourable weather.

Result of 2-12-2 Fertilizer Test on Beans at Experimental Farm, Ridgetown

To ascertain most economical rate of application per acre.

Rate of application per acre	Yield per acre	Increase over check per acre	Value of yield per acre	Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer
Lbs.	bus. lbs.	bus. lbs.				
50	26 15	1 30	$105 00	$6 00	$0 97	$6 19
100	27 0	2 15	108 00	9 00	1 94	4 63
150	26 15	1 30	105 00	6 00	2 91	2 06
200	29 15	4 30	117 00	18 00	3 88	4 63
None	24 45	.....	99 00	.....	.....	.....

Note:—It will be noticed that in the "Return for $1 spent" column, the amounts, whenever any, are fairly large for comparatively small increased yields over checks.

This is accounted for by the fact that bean prices this year were in the neighbourhood of $4 per bushel, and figures here were based on that price.

Sugar Beets

The previous work proved conclusively that the number of mixtures used might well be reduced; seven mixtures with variations in each ingredient were used. The number of plots were correspondingly increased.

Evidence gathered previously and corroborated this year shows that a mixture carrying 12 per cent. phosphate and 6 per cent. potash gives the best results. Out of twelve plots eleven gave highest with 12 per cent. phosphate and the other 10 per cent. Eight out of the twelve plots favoured 6 per cent. potash, one 8 per cent. and three 4 per cent. One-half of the plots did best with 2 per cent., three with 6 per cent. and three with 4 per cent. The nitrogen factor is so largely under the control of the farmer through the use of clovers and manure that there should be no necessity to increase nitrogen above 2 per cent.

A 2-10-6 is the general commercial mixture used by beet growers. If the phosphate were increased to 12 per cent. the mixture would then correspond with our findings.

In order to test the mixtures on a larger scale than usual acre plots were tested at Chatham with similar results as from the small plots.

Some work was done using sulphate muriate and carbonate of potash. The results are not very enlightening except that several questions arise out of the two tests for future consideration.

All beets in this country are planted in rows 22 inches apart; an earnest endeavour is made by the company to have a beet to every foot in the row. The labor is contracted for by the acre—the less beets there are the more acres can be covered by the labourer. Profits and losses are largely decided by the number of beets per acre; thinning tests were made and according to the result careless thinning costs the producer quite a sum of money.

Discussions have taken place *re* leaving the large strong plant or the small plant at thinning time—Colorado tests were in favour of the large plant but this year our test favoured the small plant. They were thinned on May 29th and during the afternoon .27 inches of rain fell and on May 30th .15 inches fell.

These were ideal showers to follow thinning of beets and may, perhaps, have had much to do with the result—no wilting whatever took place.

All calculations were made on the basis of $6.00 sugar.

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF DOMINION SUGAR CO., CHATHAM, 1928

Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
	tons	lbs.			tons	lbs.					
2-10-2...	16	1,000	13.7	83.5	3	900	$20 70	$7 82	$2 64	$99 00	$20 70
2-10-4...	15	1,500	11.9	85.5	2	1,400	16 20	8 07	2 00	94 50	16 20
2-10-6...	16	1,300	14.7	85.1	3	1,200	22 86	8 34	2 74	105 72	27 42
2-10-8...	16	100	13.9	85.4	3	.....	18 00	8 64	2 08	96 30	18 00
2-10-10..	17	800	13.4	85.8	4	700	26 10	8 96	2 91	104 40	26 10
2-10-6*..	16	700	14.0	82.4	3	600	19 80	8 34	2 37	98 10	19 80
2-10-6†..	16	1,600	13.0	85.8	3	1,500	22 50	7 92	2 84	100 80	22 50
2-10-6‡..	15	.....	14.0	83.7	1	1,900	11 70	8 34	1 40	90 00	11 70
No fert..	13	100	12.0	83.7	.....	.....	.....	.....	.....	78 30	.....

*Using sulphate of potash.

†Using muriate of potash.

‡Using carbonate of potash.

The above fertilizers were home mixed and except where otherwise stated, sulphate of potash was used.

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF DOMINION SUGAR CO., CHATHAM, 1928

Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
	tons	lbs.			tons	lbs.					
0-16-0...	10	730	14.2	85.3	.....	.....	.....	$3 30	.....	$63 22	.....
0-12-5...	12	1,215	14.9	84.1	2	54	$13 07	4 88	$2 67	81 31	$15 19
1-13-3...	11	423	14.6	85.0	.....	1,262	3 97	4 62	85	70 63	4 51
2-10-6...	10	1,399	13.9	85.3	.....	238	71	5 94	11	64 19	.....
0-0-20*..	11	1,745	15.4	86.4	1	584	8 65	3 75	2 30	79 54	13 42
0-0-20†..	12	1,096	14.0	85.3	1	1,935	11 80	3 75	3 14	75 28	9 16
0-0-20‡..	12	1,230	14.0	84.4	2	69	12 20	3 15	3 87	75 69	9 57
Check...	10	1,161	14.5	84.7	.....	.....	.....	.....	.....	66 12	.....

These plots were approximately one acre in area.

Fertilizer applied at rate of 300 pounds per acre. Commercial mixed fertilizer used in each instance.

*Using carbonate of potash.

†Using sulphate of potash.

‡Using muriate of potash.

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON FARM OF DOMINION SUGAR CO., CHATHAM, 1928

Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
	tons	lbs.			tons	lbs.					
0-12-6...	13	408	13.7	81.1	2	1,583	$16 75	$5 26	$3 18	$79 22	$16 75
2-10-6...	12	21	13.0	83.6	1	1,196	9 59	6 25	1 53	72 06	9 59
2-12-4...	14	524	12.7	82.3	3	1,699	23 10	6 31	3 66	85 57	23 10
2-12-6...	13	1,229	12.1	82.6	3	404	19 21	6 54	2 93	81 68	19 21
2-12-8...	11	655	13.3	82.7	.....	1,830	5 49	6 76	81	67 96	5 49
4-12-6...	11	310	13.5	81.4	.....	1,485	4 46	7 44	60	66 93	4 46
6-12-6...	11	1,570	13.3	82.3	1	745	8 23	8 41	97	70 71	8 24
No fert..	10	825	12.9	82.5	.....	.....	.....	.....	.....	62 47	.....

These plots were approximately one acre in area.
Fertilizer applied at rate of 300 pounds per acre.
Fertilizers were home mixed and sulphate of potash used in each instance.

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF DOMINION SUGAR CO., CHATHAM, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	17	800	15.1	82.0	4	1,300	$30 45	$7 02	$4 33	$113 97	$36 20
2	2-10-6.	14	800	13.5	81.9	1	1,300	9 90	8 34	1 18	86 40	8 63
3	2-12-4.	16	400	16.8	87.6	3	900	25 53	8 42	3 03	119 88	42 11
4	2-12-6.	17	1,400	14.7	85.8	4	1,900	31 43	8 72	3 60	112 39	34 62
5	2-12-8.	14	500	15.8	87.5	1	1,000	10 35	9 02	1 14	98 32	20 55
6	4-12-6.	15	300	15.4	85.5	2	800	16 08	9 92	1 62	101 50	23 73
7	6-12-6.	16	1,000	15.0	88.2	3	1,500	24 37	11 22	2 17	107 25	29 48
8	2-10-6.	16	1,000	14.3	84.3	3	1,500	23 06	7 92	2 91	101 47	23 70
9	no fert	12	1,500	14.2	85.0	.....	.....	.....	.....	.....	77 77	.....

RESULT OF FERTILIZER EXEPRIMENT IN SUGAR BEETS ON THE FARM OF JAS. COOPER, ST. ANNE'S ISLAND, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-16-0.	9	1,200	16.0	83.1	5	1,100	$38 85	$4 40	$8 83	$65 20	$36 65
2	0-12-4.	7	1,300	16.0	88.5	3	1,200	25 20	6 72	3 75	53 55	25 00
3	0-10-4.	9	900	15.2	87.8	5	800	35 64	6 32	5 63	62 37	33 82
4	0-8-4..	8	1,400	15.7	82.9	4	1,300	31 85	6 00	5 31	59 59	31 04
5	0-6-4..	8	1,100	16.0	88.2	4	1,000	31 50	5 64	5 58	59 85	31 30
6	2-12-4.	8	1,400	15.0	86.6	4	1,300	30 22	8 42	3 58	56 55	28 00
7	4-12-4.	9	1,500	16.0	86.8	5	1,400	39 90	9 62	4 14	68 25	39 70
8	6-12-4.	9	1,200	15.9	83.1	5	1,100	38 57	10 92	3 53	66 72	38 17
9	2-12-0.	7	400	16.5	85 0	3	300	22 83	7 45	3 06	52 20	23 65
10	2-12-2.	6	1,200	15.3	84.2	2	1,100	16 95	8 17	2 07	43 89	15 34
11	2-12-6.	8	500	16.6	87.2	4	400	30 66	8 72	3 51	60 22	31 67
12	2-12-8.	8	1,100	16.6	82.7	4	1,000	32 85	9 02	3 64	62 41	33 86
13	2-10-4.	9	1,500	16.8	84.8	5	1,400	42 18	8 07	5 22	72 15	43 60
14	2-8-4..	9	.....	14.8	85.9	4	1,900	31 68	7 72	4 10	57 60	29 05
15	no fert	4	100	16.1	87.8	.....	.....	.....	.....	.....	28 55	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF BERYL ARNOLD, CHATHAM TOWNSHIP, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	10	1,000	14.7	86.8	.....	1,500	$4 76	$7 02	$0 67	$66 67	.....
2	2-10-6.	10	1,600	13.3	87.9	1	100	6 30	8 34	75	64 80	.....
3	2-12-4.	10	1,000	16.2	87.3	.....	1,500	5 32	8 42	63	74 55	$7 77
4	2-12-6.	11	500	14.4	86.8	1	1,000	9 30	8 72	1 06	69 75	2 97
5	2-12-8.	12	600	13.7	82.5	2	1,100	15 30	9 02	1 69	73 80	7 02
6	4-12-6.	13	400	14.2	83.3	3	900	21 04	9 92	2 12	80 52	13 74
7	6-12-6.	13	1,300	15.3	87.9	3	1,800	25 93	11 22	2 31	90 77	23 99
8	2-10-6.	13	1,600	15.1	87.2	4	100	26 52	7 92	3 34	90 39	23 61
9	no fert	9	1,500	15.7	85.7	.....	.....	.....	.....	.....	66 78	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF FRANK BIRD, TUPPERVILLE, R.R. 2

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	6	1,200	16.3	89.5	.....	1,200	$4 29	$7 02	$0 61	$47 19	$2 19
2	2-10-6.	7	700	16.9	87.7	1	700	10 05	8 34	1 20	54 75	9 75
3	2-12-4.	7	100	15.7	86.5	1	100	7 19	8 42	85	48 29	3 29
4	2-12-6.	8	500	15.6	87.2	2	500	15 30	8 72	1 75	56 10	11 10
5	2-12-8.	9	300	15.0	89.3	3	300	20 47	9 02	2 27	59 47	14 47
6	4-12-6.	11	500	15.3	85.2	5	500	34 91	9 92	3 51	74 81	29 81
7	6-12-6.	10	400	15.8	84.5	4	400	28 98	11 22	2 58	70 38	25 38
8	2-10-6.	9	.....	16.6	89.4	3	.....	21 90	7 92	2 76	65 70	20 70
9	no fert	6	.....	17.0	87.9	.....	.....	.....	.....	.....	45 00	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF STANLEY CLEMENTS, CHATHAM, R.R. 7

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	13	1,600	15.0	83.9	.....	600	$1 95	$7 02	$0 27	$89 70	.....
2	2-10-6.	14	1,100	15.9	87.5	1	100	7 29	8 34	87	101 12	$10 00
3	2-12-4.	13	1,900	15.3	87.9	.....	900	2 99	8 42	35	92 76	1 64
4	2-12-6.	13	1,900	15.3	85.6	.....	900	2 99	8 72	34	92 76	1 64
5	2-12-8.	14	1,400	15.3	85.2	1	400	7 98	9 02	88	97 75	6 63
6	4-12-6.	15	600	15.7	80.2	1	1,600	12 33	9 92	1 24	104 80	13 68
7	6-12-6.	15	300	14.9	80.9	1	1,300	10 64	11 22	94	97 71	6 59
8	2-10-6.	15	1,800	15.1	81.1	2	800	15 72	7 92	1 98	104 14	13 02
9	no fert	13	1,000	15.5	84.3	.....	.....	.....	.....	.....	91 12	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF ARTHUR DAVIDSON, ESSEX, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	15	1,800	19.3	85.8	4	700	$37 62	$7 02	$5 35	$137 53	$57 26
2	2-10-6.	16	1,300	15.8	84.2	5	200	35 19	8 34	4 21	114 88	34 61
3	2-12-4.	16	700	16.2	86.6	4	1,600	34 08	8 42	4 04	116 08	35 81
4	2-12-6.	17	200	17.7	82.1	5	1,100	43 56	8 72	4 99	134 23	53 96
5	2-12-8.	16	100	16.9	87.3	4	1,000	33 52	9 02	3 71	119 57	39 30
6	4-12-6.	18	.....	17.9	80.3	6	900	51 27	9 92	5 16	143 10	62 83
7	6-12-6.	16	100	16.4	83.7	4	1,000	32 40	11 22	2 88	115 56	35 29
8	2-10-6.	16	1,300	18.0	86.1	5	200	40 80	7 92	5 15	133 20	52 93
9	no fert	11	1,100	15.9	87.0	.....	.....	.....	.....	.....	80 27	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF W. J. EASTON, CHATHAM, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	12	300	15.0	82.6	.....	900	$2 92	$7 02	$0 41	$78 97	$4 68
2	2-10-6.	16	400	15.0	84.9	4	1,000	29 25	8 34	3 50	105 30	31 01
3	2-12-4.	15	.....	16.1	86.8	3	600	23 26	8 42	2 76	105 75	31 46
4	2-12-6.	14	1,400	16.6	80.9	3	.....	21 90	8 72	2 51	107 31	33 02
5	2-12-8.	18	600	14.8	85.1	6	1,200	42 24	9 02	4 68	117 12	42 83
6	4-12-6.	16	1,300	15.6	85.5	4	1,900	33 66	9 92	3 39	113 22	38 93
7	6-12-6.	15	600	14.7	84.7	3	1,200	22 86	11 22	2 03	97 15	22 86
8	2-10-6.	16	400	15.3	86.1	4	1,000	29 92	7 92	3 77	107 73	33 44
9	no fert	11	1,400	14.7	85.0	.....	.....	.....	.....	.....	74 29	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF JAMES HUGHES, KENT BRIDGE

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	10	1,300	14.4	81.7	2	200	$13 02	$7 02	$1 85	$66 03	$14 73
2	2-10-6.	11	1,100	13.0	80.9	3	.....	18 00	8 34	2 15	69 30	18 00
3	2-12-4.	11	200	13.0	80.8	2	1,100	15 30	8 42	1 81	66 60	15 30
4	2-12-6.	11	1,400	13.3	80.7	3	300	18 90	8 72	2 16	70 20	18 90
5	2-12-8.	9	1,800	11.6	81.2	1	700	8 10	9 02	89	59 40	8 10
6	4-12-6.	11	200	13.2	81.4	2	1,100	15 30	9 92	1 54	66 60	15 30
7	6-12-6.	10	400	13.0	81.3	1	1,300	9 90	11 22	88	61 20	9 90
8	2-10-6.	10	1,600	10.8	78.6	2	500	13 50	7 92	1 70	64 80	13 50
9	no fert	8	1,100	13.2	82.3	.....	.....	.....	.....	.....	51 30	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF JOHN KIDD, WATFORD, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	13	1,300	17.5	92.0	1	1,300	$12 78	$7 02	$1 82	$105 78	$7 98
2	2-10-6.	12	1,500	18.0	82.3	.....	1,500	6 00	8 34	71	102 00	4 20
3	2-12-4.	14	200	18.6	88.4	2	200	17 43	8 42	2 07	117 03	19 23
4	2-12-6.	14	800	16.4	84.7	2	800	17 28	8 72	1 98	103 68	5 88
5	2-12-8.	15	300	17.8	88.2	3	300	24 88	9 02	2 75	119 68	21 88
6	4-12-6.	16	1,300	17.2	85.4	4	1,300	35 34	9 92	3 56	126 54	28 74
7	6-12-6.	15	1,500	19.8	88.3	3	1,500	33 37	11 22	2 97	140 17	42 37
8	2-10-6.	15	1,500	17.0	82.9	3	1,500	28 12	7 92	3 55	118 12	20 32
9	no fert	12	.....	18.3	89.2	.....	.....	.....	.....	.....	97 80	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF WILFRED ROSZELL, FLETCHER, R.R. 2

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	12	1,200	15.2	88.2	2	800	$15 84	$7 02	$2 25	$83 16	$17 37
2	2-10-6.	12	300	16.7	87.5	1	1,900	14 33	8 34	1 71	89 30	23 51
3	2-12-4.	11	800	14.5	87.8	1	400	7 50	8 42	89	71 25	5 46
4	2-12-6.	11	200	16.0	86.9	.....	1,800	6 30	8 72	72	77 70	11 91
5	2-12-8.	12	.....	14.8	87.0	1	1,600	11 52	9 02	1 27	76 80	11 01
6	4-12-6.	11	500	14.3	85.7	1	100	6 45	9 92	65	69 18	3 39
7	6-12-6.	12	900	17.2	89.1	2	500	17 10	11 22	1 52	94 62	28 83
8	2-10-6.	11	1,400	16.4	86.5	1	1,000	10 80	7 92	1 36	84 24	18 45
9	no fert	10	400	14.9	87.8	.....	.....	.....	.....	.....	65 79	.....

RESULT OF FERTILIZER EXPERIMENT ON SUGAR BEETS ON THE FARM OF JOHN WORKMAN, ESSEX, 1928

Plot No.	Fertilizer analysis	Yield per acre		Sugar per cent.	Purity per cent.	Increase over check		Value of increase over check per acre	Cost of fertilizer	Return for $1 spent in fertilizer	Value of yield per acre	Increased value per acre over check
		tons	lbs.			tons	lbs.					
1	0-12-6.	13	1,900	18.6	85.5	2	1,100	$21 16	$7 02	$3 01	$115 78	$25 72
2	2-10-6.	14	500	18.2	83.4	2	1,700	23 08	8 34	2 76	115 42	25 36
3	2-12-4.	15	1,500	18.4	84.8	4	700	35 67	8 42	4 23	129 15	39 09
4	2-12-6.	16	1,600	18.4	84.1	5	800	44 28	8 72	5 07	137 76	47 70
5	2-12-8.	14	1,400	18.7	83.7	3	600	27 55	9 02	3 05	122 74	32 68
6	4-12-6.	15	600	18.7	83.6	3	1,800	32 56	9 92	3 28	127 75	37 69
7	6-12-6.	13	1,600	18.6	85.5	2	800	19 92	11 22	1 77	114 54	24 48
8	2-10-6.	14	1,100	19.1	85.6	3	300	26 93	7 92	3 40	124 40	34 34
9	no fert	11	800	17.8	81.2	.....	.....	.....	.....	.....	90 06	.....

Sugar Beet Thinning Experiment, 1928

Distance of Thinning	Yield per acre		Sugar percentage	Value of yield per acre
	tons	lbs.		
9 inches apart	16	772	15.3	$108 96
12 " "	16	444	14.9	104 63
15 " "	15	1,133	14.5	94 49
18 " "	14	1,495	15.4	98 80
21 " "	13	218	15.6	89 14
Large seedling plants left standing	11	940	15.8	79 14
Small seedling plants left standing	14	675	14.8	91 36

Swine Experiment

Pens 1, 2, 3 and 4 represented a test of barley replacing corn in a ration. According to market price, the barley produced one-half of a cent per pound cheaper but it took 2.621 pounds barley as against 2.333 pounds corn for every pound gain.

Pens 5, 6, 7, 8 and 9 were just carried to ascertain production costs.

Swine Experiment, 1927-1928

Pen and Breed	No. of pigs	Weight at beginning	Gain	Oats	Oats and Barley	Barley	Corn	Hominy	Tankage	Mangels	Total cost	Cost per cwt.
		lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	$	$
1 Yorks	9	969	819	665	.....	.....	1,680	490	297½	282½	61 04	7 45
2 Yorks	8	686	856	670	.....	2,345	.....	585	276½	444	67 69	7 90
3 Yorks	8	691	919	674	.....	.....	2,373	589	386½	388	78 77	8 57
4 Yorks	8	610	915	675	.....	2,295	.....	585	272½	444	66 88	7 30
5 Yorks and Berks	10	1,069	749	.....	1,302	.....	1,540	140	208½	670	58 32	7 78
6 Berks	6	898	372	.....	936	.....	460	133	78½	236	28 00	7 52
7 Yorks	10	1,401	552	.....	1,135	.....	845	147	115	502	39 93	7 23
8 Berk. and Tam	8	1,084	428	.....	1,021	.....	605	140	88	341	32 54	7 60
9 Tam	6	974	196	.....	746	.....	105	119	30	164	16 70	8 52

Oats $0.55.
Corn $1.00.

Swine Experiment (Summer) 1928

Pen	Weight at beginning	Gain	Oats	Barley	Corn	Hominy	Tankage	Total cost	Cost cwt.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.		
1 None	529	602	810	560	450	575	210	$47 81	$7 94
2 Alfalfa	571	626	750	425	510	625	165	45 27	7 23

The high cost of feed in the spring of 1928 raised the question of the value of pasture. The above test will be continued for four more seasons. The difference in cost of production was not so great as might be anticipated.

BEEF CATTLE

Commenced to feed Nov. 15, 1927.
25 steers—18,310 lbs. Average, 732.4 lbs.
18,310 lbs. cost $1,600.00.
Sold April 18th, 1928.
No. of days on feed—155.

20,888 lbs. at 9¼	$2,260 40
3,760 lbs. at 8¾	329 00
24,640 lbs. S.P.	$2,589 40
C.P.	1,600 00
Gain	$989 40

Gain weight 6,330 lbs. or 1.63 lbs. per head per day.

Feed Consumed

Silage, 30 tons at $3.00	$90 00
Alfalfa hay, 16 tons at $10.00	160 00
Bean straw, 6½ tons at $4.00	26 00
Soy beans, 2,500 lbs. at 3 cents	75 00
Corn, 6,500 lbs. at 1 4/5	117 00
White beans (culls), 1,500 lbs. at 1½	22 50
	$490 50

Total cost of steers, $2,090.50.
Net gain, $498.90.
Cost per pound gain 7.74 cents.

NEW LISKEARD DEMONSTRATION FARM

The annual report as found in the following pages consists of several tables of results, facts and figures. The data presented have been carefully checked and in some instances have been compared with results of last year.

Unseasonable weather in Temiskaming during the late spring delayed seeding and early prospects were unfavourable, but exceptionally good growing weather later in the summer stimulated rapid growth. Much rain fell again during the normal period of harvesting of forage, grain and root crops. The season demonstrated very forcibly the necessity of farmers producing early maturing crops. The Farm had a splendid demonstration in a field of Alaska well matured and well threshed.

The natural resources of the country in metals and timber products are attracting large financial interests from all parts of America. This interest is doing much to develop the north.

The millions of acres of arable land in the clay belt have also attracted much outside interests which is also gratefully acknowledged by the farmers living in the above mentioned area. The Farm demonstrates the agricultural possibilities for the future and special attention to the needs of the district. The live stock industry, poultry, field, root and vegetable crop work comprises the staple lines of farm activities.

Dates of Farm Operations

The dates upon which the more important farm operations commenced for the past year, are as follows:—

Dates of Farm Operations for 1928

First work on land (ploughing)	May 8th.
First work on land (cultivating)	May 13th.
First seeding (cereals)	May 14th.
First planting potatoes	June 12th.
First seeding turnips	June 15th.
Summer fallowing commenced	June 15th.
Ensilage cut	July 18th and 26th.
First cutting alfalfa	July 25th.
First cutting clover	August 1st and 8th.
First cutting mixed hay	August 9th and 23rd.
First cutting fall wheat	August 20th and 22nd.
Summer fallowing finished	August 23rd.
First cutting cereals	August 27th.
Seeding winter wheat	August 29th.
First digging potatoes	October 2nd
First digging turnips	October 25th.
Ploughing stopped by frost	November 16th.

Seasonal Notes

Farm operations of last spring commenced on May 8th which was eleven days later than in the previous year. This operation was one of plowing. The first cultivation on the land was also later this year by nine days. Total precipitation for the year was 38.57 inches, 13.11 inches more than that of 1927 and 18.1 inches more than that of 1926. Such a heavy precipitation had its effect on the harvesting of all crops. October registered the greatest amount of rainfall for the year with a total of 6.03 inches. July registered the highest in 1927 with a total of 3.87 inches. August 15th and 16th registered the highest temperature for the year, i.e., 86 degrees Fahrenheit. The lowest temperature was registered on February 25th, when it was 52 degrees below zero. The frost free period was 110 days, and the average highest temperature was 62.9 and average lowest 1.54 for 1928.

The following table will be of interest as it gives the total hours of sunshine per year for the past five years and the average per year for the whole of that period.

TOTAL HOURS SUNSHINE

	hours
November 1st, 1923 to October 31st, 1924	1,485.6
November 1st, 1924 to October 31st, 1925	1,487.8
November 1st, 1925 to October 31st, 1926	1,573.9
November 1st, 1926 to October 31st, 1927	1,590.4
November 1st, 1927 to October 31st, 1928	1,412.3
Total sunshine for 5 years	7,550.0
Average for 5 years	1,510.0

WEATHER RECORDS

PRECIPITATION AND TEMPERATURE

Total precipitation for year	38.570 ins.
Average precipitation for last 5 years	25.52 "
Total precipitation for 7 months ending October 31, 1928	28.38 "
Month having greatest precipitation—October	6.035 "
Highest temperature during year—86 degrees	Aug. 15 and 16.
Lowest temperature during year—52 below zero	Feb. 25.
Average highest temperature	62.91
Average lowest temperature	1.54
Average monthly temperature	32.59
Last frost	June 1st.
First frost	Sept. 18th.
Number of days between	110 days
Average frost-free period for 34 years	120 "
Shortest frost-free period on record—1923	73 "
Longest frost-free period on record—1909	157 "

SUNSHINE

Bright sunshine on	247 days
Total hours of bright sunshine	1,412.3 hrs.
Average hours sunshine per day	3.86 "
Yearly average number of days with bright sunshine (5)	268 days
Month having greatest number of hours of sunshine—August	218.8 hrs.
Month having least number of hours of sunshine—Nov. 1927	33.1 "
Average hours sunshine per day during November, 1927	1.10 "

WEATHER OBSERVATIONS, 1927-1928.

Month	Temperature					Sunshine	
	Highest	Date	Lowest	Date	Average	Days of bright sunshine	Hours of sunshine
November, 1927	60	12	−3	28	26.51	10	33.1
December, 1927	41	8 & 29	−24	24	12.6	13	41.1
January, 1928	36	7 & 13	−38	30	6.16	12	64.3
February	33	13	−52	25	4.18	19	91.6
March	47	24	−30	6	17.27	26	123.8
April	64	30	−8	16	29.4	25	188.4
May	77	20	26.5	14	48.8	23	166.9
June	80	13	32	1	57.78	26	160.8
July	83	7 & 16 & 24	38	30	64.27	24	156.8
August	86	15 & 16	36	25	31.55	26	218.8
September	75	8	26	24	49.9	24	111.3
October	73	4	15	30	42.7	19	55.4

PRECIPITATION

Month	Rain		Snow		Total as Rain		
	Days rain fell	Inches	Days snow fell	Inches	Days	Inches	Average for 34 years
November, 1927	8	1.06	11	17.5	17	2.81	2.13
December, 1927	5	T	11	18.5	13	1.85	1.42
January, 1928	4	.05	20	13.75	20	1.42	.96
February	..	..	15	19.	15	1.9	1.29
March	5	.17	16	9.	20	1.07	1.26
April	8	2.27	9	11.25	14	3.39	1.81
May	16	2.803	.....	.....	16	2.803	2.68
June	18	4.607	.....	.....	18	4.607	2.86
July	22	4.780	.....	.....	22	4.780	3.66
August	15	2.775	.....	.....	15	2.775	2.78
September	20	5.13	.....	.....	20	5.13	3.35
October	18	6.02	6	.15	22	6.035	2.91

DIRECTION OF WIND

By TWELVE-HOUR PERIODS

Month	N	N-W	W	S-W	S	S-E	E	N-E	Prevailing direction
November, 1927	4	25	7	5	5	11	2	1	N.W.
December, 1927	7	23	3	9	0	13	2	4	N.W.
January, 1928	1	32	4	10	2	8	1	3	N.W.
February	0	30	2	3	0	18	2	3	N.W.
March	1	38	6	1	3	11	1	2	N.W.
April	9	22	2	9	3	12	0	5	N.W.
May	1	29	1	9	0	11	2	4	N.W.
June	1	26	0	6	0	12	0	13	N.W.
July	0	25	0	16	0	8	0	12	N.W.
August	0	18	0	20	0	16	0	8	S.W.
September	0	24	4	19	1	6	1	3	N.W.
October	7	17	6	14	7	5	1	4	N.W.

ANIMAL HUSBANDRY

Holsteins. The addition of the new Holstein bull to the herd seems to have had the desired effect. The few heifers sired by him have better lines and decidedly more quality than those left by the previous sire. They should give a good account of themselves in their milking periods as they are out of high testing dams. The sire, Springbank Snow Majesty, is out of a 4.2 per cent. dam and traces back to Dekol Plus Segis Dixie on his sire's side.

Shorthorns. Special mention should be made of the records of Lady Cruickshank the 4th which cover a period of three years at twice a day milking; 1926, 10,639 pounds; 1927, 10,037 pounds; 1928, 13,754 pounds.

A very splendid crop of calves sired by the new Shorthorn bull, Ranger, have been added to the herd. The bull calves are looked upon as promising breeders for the future and are all spoken for soon after birth.

The Herd. The herd passed another clear test for T.B. during September without a single reactor. During November, 1927, the Farm lost one of the triplet heifers (Academy Mary Sylvia) from indigestion and was very unfortunate in losing two remaining triplets in February, 1928, with subcutaneous hemorrhagic septicemia. The entire herd was inoculated at that time for hemorrhagic septicemia and again in December, 1928.

Twice a day milking was featured at all times with no forced feeding. The farm-grown feeds were used as the major portion of the ration and only small amounts of molasses, oilcake meal and bran were purchased. All cows of milking age are entered in the R.O.P. and tests were made by disinterested parties. The following tables of facts and figures are considered very satisfactory. Attention is drawn to the average production and butter fat test.

HERD RECORDS FOR 1928

Name of Cow	Age at beginning of lacatation period	Date of freshening	No. of days in period	Total lbs. milk produced
(Holstein)				
Academy Mary Sylvia	3 years	May 2/27	194	6,866
Academy Nellie Dekol	3 "	May 30/27	232	7,561
Academy Pauline Echo	3 "	June 2/27	340	10,824
Academy Pontiac Echo	3 "	May 23/27	283	9,835
Bessie Dutchland Schuiling	4 "	Mar. 22/27	207	7,105
Daisy Artis Dutchland	4 "	Nov. 26/27	370	12,207
Faforit Hartog Johanna	3 "	Mar. 28/27	347	11,637
Francy Johanna Hartog	4 "	Apr. 13/27	268	7,869
Johanna Butter Lass Dekol	4 "	Apr. 5/27	248	6,814
Lady Snowflake of Temiskaming	3 "	Nov. 15/26	392	13,039
Valentine Segis Keyes	5 "	June 11/27	331	12,375
Hartog Johanna Pontiac Echo	2 "	Mar. 8/28	266	5,000
Totals	41 years		3,478	111,132
Averages	3.4 "		289	9,261
(Shorthorn)				
Lady Cruickshank 4th	9 years	May 26/27	464	13,754
Lady Refiner 2nd	3 "	Dec. 8/27	266	5,403
Nellie Cruickshank	3 "	May 5/27	221	2,593
Lady Peer	5 "	Oct. 10/27	263	3,541
Rosebud Patricia	2 "	Oct. 8/26	640	11,569
Totals	22 years		1,854	36,860
Averages	4.5 "		370	7,372
Totals for whole herd	63 years		5,332	147,992
Averages for whole herd	3.7 "		313	8,705

NOTE:—Bessie Dutchland Schuiling was sold before she completed her lactation period.

Name of Cow	Daily average yield of milk	Average per cent. fat	Value of whole milk at 10c per per quart	Number pounds of butter fat
(Holstein)				
Academy Mary Sylvia	35.39	3.8	$274 64	260.90
Academy Nellie Dekol	32.59	3.7	302 44	279.75
Academy Pauline Echo	31.83	3.9	432 96	422.13
Academy Pontiac Echo	34.75	3.6	393 40	354.06
Bessie Dutchland Schuiling	34.32	3.6	284 20	255.78
Daisy Artis Dutchland	32.99	3.8	488 20	463.86
Faforit Hartog Johanna	33.53	4.1	465 48	477.11
Francy Johanna Hartog	29.36	4.2	314 76	330.49
Johanna Butter Lass Dekol	27.47	4.0	272 56	272.56
Lady Snowflake of Temiskaming	33.26	3.7	521 56	482.44
Valentine Segis Keyes	37.38	3.4	495 00	420.75
Hartog Johanna Pontiac Echo	18.79	3.9	200 00	195.00
Totals	381.66	45.7	$4,445 28	4,214.83
Averages	31.80	3.8	362 44	351.23
(Shorthorn)				
Lady Cruickshank 4th	29.64	4.4	$550 16	605.17
Lady Refiner 2nd	20.31	4.7	216 12	253.94
Nellie Cruickshank	11.73	4.1	103 72	106.31
Lady Peer	13.46	4.2	141 64	148.72
Rosebud Patricia	18.07	4.7	462 78	543.76
Totals	93.21	22.1	$1,474 42	1,657.90
Averages	18.64	4.4	294 88	331.58
Totals for whole herd	474.87	67.8	5,919 70	5,872.73
Averages for whole herd	27.93	3.9	348 21	345.45

LIST OF HOLSTEINS—January 1st, 1929

FEMALES:

9 two-year-old heifers.
5 one-year-old heifers.
2 four-year-old cows.
5 mature cows.
2 calves.

MALES:

1 two-year-old bull.

LIST OF SHORTHORNS—January 1st, 1929

FEMALES:

1 one-year-old heifer.
2 two-year-old heifers.
3 four-year-old cows.
2 mature cows.
2 calves.

MALES:

1 two-year-old bull.

Bull Service. As the Farm is particularly desirous of maintaining the health of the herd, farmers are not encouraged to bring their cows to the herd sires for services although they are not denied the privilege. A few farmers, however, living adjacent to the Farm, made use of this service.

Sheep. The flock at present consists of one ram, twenty-seven bred ewes and nine ewe lambs, all of which are pure bred Shropshires. A number of typy ram lambs with good conformation are being kept over for sale, as shearling rams to farmers desiring same.

From the twenty-four ewes bred in the fall of 1927, thirty-eight lambs were born, seven of which later died leaving a total of thirty-one. From this number thirteen ewe lambs were raised.

The flock has been drenched three times during the year for intestinal parasites with noticeable results. There was plenty of nutritious pasture in the fall of 1927. The ewes, therefore, went into winter quarters in good condition. Iodized salt was given the ewes after they were bred to guard against the development of goitre in the spring lamb crop.

Sheep Register. By having such a complete register, or tab on the flock, the standard may be raised to the type, quality and weight desired for the breed. No ewes are bred at the Farm as lambs. The following table is a copy of the register and gives complete information regarding the flock.

LIST OF BREEDING EWES 1928-1929

Private number	Registered number	Age	Number of lambs	Private number of ewe lambs	Private number of ram lambs
26–53	51,404	2	2	both dead	.....
24–19	44,835	4	2	28–1	28–2
26–69	51,417	2	1	.....	28–4
24–25	44,838	4	2	.....	28–8
					28–6
26–55	51,405	2	1	28–3	.....
26–49	51,402	2	1	28–5	.....
24–5	44,952	4	1	28–7	.....
24–17	44,834	4	1	.....	28–10
25–47	51,401	2	2	28–9	28–12
23–15	39,548	5	2	28–11	28–14
26–25	51,384	2	1	28–13	.....
25–11	48,216	3	2	(1) dead	28–16
23–1	39,538	5	2	28–15	28–18
25–15	48,221	3	2	.....	28–20
					28–22
23–5	39,541	5	2	(1) dead	.....
				28–17	.....
26–15	51,378	2	2	.....	28–24
26–37	51,391	2	1	.....	28–26
					28–30
23–20	28,406	7	2	.....	28–34
					28–36
24–1	44,827	4	2	28–19	.....
				28–21	.....
23–3	39,558	5	2	.....	28–28
					28–32
26–77	51,423	2	1	28–23	.....
26–43	51,397	2	1	28–25	.....
26–3	51,364	2	1	28–27	.....
23–3	39,542	5	3	dead	.....

EWE LAMBS SELECTED TO KEEP OVER IN FARM STOCK

Private number	Registered number	Age	Remarks
26–25	51,384	2	
27–14	55,799	1	
27–22	55,882	1	
27–2	55,787	1	
27–10	55,794	1	
27–20	55,804	1	

Canadian Co-Operative Wool Growers, Ltd.

Comments. The pasture was very luxuriant in fall of 1927. Sheep grew a healthy fleece with plenty yoke and quality. The average weight of forty-two fleeces was 8.69 pounds. The weight of fleeces this year averages 1.39 pounds more than that of 1927.

Grade	1927		1928	
	Price	Price	Pounds	Price
Medium staple	43	$0 28	.....	.....
Low medium staple	282	25	347	35
Medium tags	10	05	18	07
	335	$83 04	365	$122 71
Sacks, twine, freight and selling charges	.....	12 51	.....	$13 45
Net proceeds	.....	$70 53	.....	$109 26

A rebate of 83 cents from selling charges 1927 was returned this year.

Club Work. The Farm distributed three flocks of sheep to three junior farmers in the district last fall. This makes a total of nine flocks now out. The surplus from the flock is profitably utilized in this way as it interests boys in sheep work. Each flock consists of three bred ewes and two unbred lambs. The quality and type of the ewes and lambs given out are considered very good.

Horses. Three teams are kept on the Farm at the present time. A Percheron team consisting of a young gelding and a young mare, was purchased in the spring. They are good workers and have proven satisfactory.

The summer months, being so wet, was hard on the horses. There was much mud and soft soil to work on. Consequently the horses are in poorer condition than usual. They were kept busy during the winter months of 1927-28 hauling gravel for the Farm. The two old teams are showing their age and will have to be replaced before long.

Hogs. Three litters were raised and disposed of for breeding and meat purposes. The herd consists of two, two-year-old breeding sows and a boar. There is still lack of accommodation for going into the hog business more extensively.

Poultry (Barred Rocks). The new poultry house is giving good satisfaction, but proper accommodation is lacking for giving anything like justice to this department. A number of good cockerels have been disposed of this fall to farmers of the district and three cockerels of good type were purchased from the Kemptville Agricultural School.

Field Husbandry

Hay Crops. The hay crop consists of eighty acres, made up of twenty acres of mixed hay, twenty acres of alfalfa and forty acres of red clover. Of the latter, sixteen acres were used for silage. One-third of the alfalfa spoiled as a result of rain. No second cut of alfalfa was made as conditions at the time were responsible for having the field plowed. A total of seventy acres were seeded down last spring to constitute the hay acreages for the coming year, including mixed, red clover and alfalfa.

Pasture. Pasture was obtained from cleared land and while there was an abundance of moisture, the grass lacked substance. The meadows being very wet at all times, were badly tramped.

Rape. Five acres had been planned for rape but the prolonged wet spell prohibited work on the land until haying. It was then not required as the sheep had the use of the aftermath from meadows, which was luxuriant and abundant.

Silage. Two silos 13 ft. x 30 ft. were filled from sixteen acres of red clover. Much water was added to the ensilage as the clover had grown coarse and was a little too fibrous. It makes splendid feed for the live stock and there will be sufficient to last until pasture is available.

Roots. Turnips were a fair crop, while potatoes were almost a failure. The latter were sown previously to heavy rains and those not drowned out then, rotted badly before harvest or after digging.

Corn gave a fair crop of ears for table use.

Grain Crops. The grain acreage was comprised of eighty acres of oats, ten acres of O.A.C. No. 21 barley and five acres of Potter peas and twenty acres of fall wheat.

The oats were comprised of equal acreages of Banner and Alaska varieties and at least twenty acres of the Alaska were completely drowned out. The peas suffered likewise and the remaining oats hardly averaged twenty bushels to the acre.

Fall wheat seemed to smother out in places. This was due to the condition of the field as some ice had formed in several spots and remained until melting away in the spring. As a consequence, the wheat had an uneven stand. One-third of the field was in fact not more than one-half a crop. Despite this and the very wet harvest, the twenty acres threshed 480 bushels. Twenty acres (summer fallowed) were sown to fall wheat August 29th. A good stand was observed before late fall.

Seventy acres were seeded down with the spring grains, using the following mixture:—

Timothy	7	lbs. per acre
Red Clover	5	" " "
Alsike	3	" " "
Alfalfa	1	" " "
Total	16	" " "

EXPERIMENTAL WORK

Variety Test With Spring Wheat

Date of Seeding—May 15th, 1928

Variety	Date of ripening	Number of days ripening	Yield of grain per acre
Marquis	Sept. 11th	120	10.0 bush.
Garnet	Aug. 25th	103	21.6 "
Ruby	Aug. 28th	106	11.6 "
Early Red Fife	Sept. 5th	114	18.3 "
Early Red Fife (Ottawa)	Sept. 7th	116	16.6 "
Marquis (Thomas)	Sept. 8th	117	23.3 "
Reward	Aug. 25th	103	18.3 "
O.A.C. No. 85	Sept. 1st	110	23.3 "
Quality	Aug. 25th	103	18.3 "
Emmer	Sept. 12th	121	45.0 "
Kota (Steele Briggs)	Sept. 8th	103	5.8 "

Variety Test With Barley

Date of Seeding—May 17th, 1928

Variety	Date of ripening	Number of days ripening	Yield of grain per acre
Charlottetown No. 80	Sept. 8th	115	43.7 bush.
O.A.C. No. 21	Aug. 25th	101	47.8 "
Himalayan	Sept. 5th	112	36.6 "
Guy Mayle	Sept. 8th	115	16.6 "
Black Hull	Aug. 25th	101	36.6 "
Chinese	Aug. 25th	101	58.3 "
Manchurian	Aug. 28th	104	54.1 "

Variety Test With Oats

Date of Seeding—May 17th, 1928

Variety	Date of ripening	Number of days ripening	Yield of grain per acre
Victory	Sept. 12th	119	32.3 bush.
Assalman	Sept. 12th	119	52.9 "
O.A.C. No. 144	Sept. 10th	117	82.3 "
Banner	Sept. 13th	120	50.0 "
Abundance (Ottawa)	Sept. 13th	120	41.1 "
Abundance	Sept. 12th	119	38.2 "
O.A.C. No. 72	Sept. 8th	115	58.8 "
O.A.C. No. 3	Aug. 18th	94	61.7 "
O.A.C. (Guelph)	Aug. 27th	103	32.3 "
Alaska	Aug. 25th	101	50.0 "
Sparkler	Sept. 8th	104	44.1 "
Black Joanette	Sept. 8th	115	41.1 "
Liberty	Aug. 25th	101	47.0 "

Variety Test With Peas in Muck Soil

Date of Seeding—May 16th, 1928

Variety	Date of ripening	Number of days ripening	Yield of peas per acre
MacKay	Sept. 17th	125	18.3 bush.
Early Britain	Sept. 6th	114	15.0 "
Early Raymond	Aug. 29th	106	21.6 "
Potter	Sept. 5th	113	25.0 "
Golden Vine	Sept. 5th	113	11.6 "
O.A.C. No. 181	Aug. 29th	106	21.6 "
Zippinaw	Sept. 5th	113	10.0 "
Chancellor	Aug. 28th	105	13.3 "
Canadian Beauty	Aug. 30th	107	11.6 "
Temiskaming	Sept. 8th	116	13.3 "
Thomas Laxton	Aug. 22nd	99	11.6 "
White Wonder (Guelph)	Sept. 5th	113	15.0 "

VARIETY TEST WITH PEAS ON CLAY SOIL

Date of Seeding—May 21st and 23rd

Variety	Date of ripening	Number of days ripening	Yield of peas per acre
MacKay	Aug. 27th	99	7.5 bush.
Early Britain	Aug. 28th	100	6.6 "
Early Raymond	Aug. 22nd	94	5.0 "
Potter	Aug. 25th	97	8.3 "
Golden Vine	Aug. 27th	99	5 0 "
O.A.C. No. 181	Aug. 25th	97	10.0 "
Zippinaw	Aug. 27th	97	5.8 "
Chancellor	Aug. 25th	95	5.0 "
Canadian Beauty	Aug. 30th	100	8.3 "
Temiskaming	Aug. 30th	100	6.6 "
Thomas Laxton	Aug. 22nd	92	3.3 "
Spanish	Aug. 28th	98	5.0 "

ENSILAGE MIXTURES

Dates of Seeding—May 19th and 29th

Mixture	Date of ripening	Number of days ripening	Yield of tons per acre
Oats and Peas (O.A.C. No. 72 and Potter)	Aug. 20th	94	9.4 tons.
Oats, Peas, Vetch (O.A.C. No. 72, Potter, Sand Vetch)	Aug. 22nd	86	10.0 "
Sunflowers (Mammoth Russian)	Sept. 19th	124	24.0 "

PLOTS OF GRAIN MIXTURES

Date of Seeding—May 18th, 1928

Mixture	Date of ripening	Number of days ripening	Yield per acre
Oats and Wheat (Alaska and Garnet)	Aug. 28th	103	900 lbs.
Oats and Wheat (O.A.C. No. 72 and Marquis)	Sept. 6th	112	1,500 "
Oats and Peas (O.A.C. No. 72 and O.A.C. No. 181)	Sept. 12th	118	1,300 "
Oats, Barley and Peas (O.A.C. No. 72, O.A.C. No. 21, Early Raymond)	Sept. 6th	112	1,900 "
Oats, Barley and Peas (O.A.C. No. 72, O.A.C. No. 21, O.A.C. No. 181)	Sept. 6th	112	1,500 "
Oats and Barley (O.A.C. No. 3, O.A.C. No. 21)	Aug. 28th	103	1,500 "
Oats and Barley (Alaska and O.A.C. No. 21)	Aug. 28th	103	1,000 "
Oats and Wheat (O.A.C. No. 3 and Garnet)	Aug. 25th	100	1,600 "
Oats and Wheat (Banner and Marquis)	Aug. 30th	105	800 "

COMMENTS

Experimental Work with Cereals. Work of an experimental nature is regarded as being very important in this district. A limited amount of plot work was carried on with the testing of varieties of cereals for crop yields, date

of maturity, strength of straw and general suitability to the district. Proper facilities for threshing the products from these plots interferes to some extent with proper application to the work. It was hoped in 1927 that the necessary machinery required to carry on with would be available for 1928. It was not obtained, however, but will likely be had to handle the 1929 plot work.

The results obtained this year are not at all gratifying, in fact, are misleading. The early maturing varieties of grain were mostly ruined by the over activities of sparrows. The later plots were beaten down with heavy and continuous rain and as a result of this, much did not mature evenly and could not be harvested normally as the grain was spoiled with dirt. That portion harvested was damp and as no machine was available for threshing, the grain was beaten or rubbed from the straw. The foregoing tables have given the details regarding varieties, dates of seeding, dates of cutting and yields per acre.

EXPERIMENTAL WORK WITH ROOTS AND VEGETABLES

Fertilizer Experiment with Turnips

Plot No.	Fertilizer mixture	Yield per plot pounds	Yield per acre bushels
A	0–16–0	510	408
A	0–12–5	515	414
A	2–12–6	500	400
Check	.....	270	216
B	0–16–0	575	460
B	0–12–5	485	388
B	2–12–6	490	392
Check	.....	335	268

Fertilizer Experiment with Potatoes

Size of plot: 1/100th of an acre. Rows 175 feet long; 30 inches apart.

Plot No.	Fertilizer mixture	Yield per plot pounds	Yield per acre bushels
1	0–12–4	49	81.6
Check	.....	62	103.3
2	0–12–6	28	46.6
Check	.....	48	80.0
3	0–12–8	58	96.6
Check	.....	39	65.0
4	2–12–4	75	125.0
Check	.....	55	91.6
5	2–12–6	51	85.0
Check	.....	15	25.0
6	2–12–8	18	30.0
Check	.....	9	15.0
7	4–12–6	86	114.3
Check	.....	60	100.0
8	3–10–5	55	91.6
Check	.....	35	58.3

Comments. Turnips again were the most important root crop on the Farm. The yield per acre was not as high as that of 1927 but was quite satisfactory. Several fertilizer experiments were carried on again this year in co-operation with the Chemistry Department, O.A.C., Guelph. The results are not very satisfactory as weather conditions interfered to such an extent, that the experiments are not considered to be of much interest to northern agriculture. The fertilizer experiments with Alaska oats were of interest for a time but final results did not prove anything. Sparrows and adverse weather disturbed the plots. Yield tests with corn, buckwheat, potatoes, beets, carrots, parsnips, spinach, mangels, turnips, onions, cabbage, cauliflower, tomatoes, flax and numerous other crops were carried on but results as to yield per acre could not be ascertained. The production of corn for a field crop is not recommended and is a very catchy crop even with the early varieties for table use.

Farm Beautification. The practicability of farm beautification was realized last year and definite plans were made to beautify the roadways and grounds around the farm for this year.

Stoning and gravelling of the barnyard, lanes and roadways in front of buildings and elsewhere were started last winter and will be continued this coming year.

A sign "Ontario Department of Agriculture. Demonstration Farm" was erected this year and is in plain view to the traffic of the Ferguson Highway. Twenty-four Manitoba maples were planted on May 23rd. They have done very well to date.

Fencing. As time goes on, the Farm is erecting the necessary fencing. On May 23rd, 250 rods were erected with an additional 220 rods put up in October, making a total of 470 rods of new fencing this year.

Bush Fruits. Small fruits consisting of red and black currants, gooseberries, raspberries and strawberries did very well this year. The demonstration work while limited was greater than that of 1927 and has proven that such crops can be grown quite successfully in this section. Three crab apple trees bore fruit, although set out very recently.

In strawberries, the Senator Dunlop and Williams varieties have proven most satisfactory. The Dunlop variety ripened July 10th and picking continued until August 7th, Williams from July 10th to July 24th. The Sunbeam variety of raspberries yielded heavier than the Herbert this year and picking continued from August 12th to September 12th.

Summary

In summarizing the work of the Farm for the year special attention is drawn to the successful results obtained from the sheep flock, the sheep club work, and the dairy herd. Taking all conditions into consideration, the Farm may well look on the past with pride, the present with satisfaction and the future with hope. The results of the past year were not too encouraging as Northern Ontario endured the hardships of exceptionally heavy and continuous rainfall. As a result of this clover seed did not mature to any appreciable extent and much cut clover was spoilt before it could be harvested. The production of seed would approximately be around 10 or 12 per cent. of that for last year. The potato crop was a complete failure in many sections as weather conditions interfering very much at the time of growth and previous to harvesting resulted in many acres of potatoes rotting in the ground.

In live stock development much interest is taken in attempting to gradually improve the type of sheep and dairy cattle. The Farm has assisted in meeting the demand for pure bred stock including bulls, rams and ewes. Several good cockerels have been disposed of to poultrymen of the district. The Farm's feeding methods have been adopted or studied by several farmers.

The information revealed from the fertilizer experiments is not considered as entirely satisfactory. Extreme weather conditions would play too big a part in the results. With turnips, there was a noticeable differences in yield between fertilized and check plots. In potatoes results would indicate that nitrogen added to the soil in some form gives good results.

The variety test with peas indicated that while peas matured from one to three weeks earlier on clay soil the yield was higher from the muck soil. This experiment was also altered by birds and much rain.

Ontario Department of Agriculture

ANNUAL REPORT

OF THE

STATISTICS BRANCH

1928

PART I.—AGRICULTURAL STATISTICS
PART II.—CHATTEL MORTGAGES

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PART I—AGRICULTURAL STATISTICS

THE WEATHER

TEMPERATURE.—The following table gives the temperature of the Province for each month during the last five years, together with the mean annual temperature, also the mean temperature for the six months, April-September, practically the growing season, together with the average for the five years, 1924-1928, and the forty-seven years, 1882-1928.

Months	1928	1927	1926	1925	1924	1924–1928	1882–1928
	°	°	°	°	°	°	°
January	20.4	17.8	19.6	14.1	16.9	17.8	17.9
February	18.8	23.2	17.2	23.9	15.8	19.8	17.1
March	26.6	33.4	22.0	31.5	29.1	28.5	27.5
April	38.9	42.2	34.8	44.2	41.1	40.2	41.7
May	52.5	51.9	51.1	49.1	48.6	50.6	53.5
June	60.6	59.5	58.5	65.3	61.6	61.1	63.3
July	68.3	66.9	66.5	65.4	65.6	66.6	67.2
August	68.4	62.6	66.3	66.9	64.5	65.7	65.8
September	55.8	61.7	57.4	59.5	55.6	58.0	59.2
October	49.5	51.1	45.8	39.9	49.9	47.2	47.5
November	36.8	37.8	33.9	34.1	36.1	35.7	35.3
December	28.6	24.7	20.7	22.3	18.6	23.0	23.6
Annual mean	43.5	44.4	41.2	43.0	41.9	42.8	43.3
Mean for six months April-September	57.4	57.5	55.8	58.4	56.2	57.0	58.5

The mean temperature for 1928 was 43.5 degrees, or 0.9 degrees lower than the preceding year, and 0.2 degree above the normal of the forty-seven years, 1882-1928.

The mean of the six growing months, April-September, was 57.4, or 0.1 degree below the preceding year, and 1.1 degrees colder than the forty-seven-year normal. Eight months were above and four below normal, ranging from 5.0 degrees above in December, to 3.4 degrees below in September.

SUNSHINE.—In the following the averages of sunshine are derived from the records of the weather stations at Woodstock, Toronto, Lindsay, Kingston and Ottawa.

Months	Sun above horizon	1928	1927	1926	1925	1924	1924–1928	1882–1928
	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
January	285.7	63.2	84.8	55.5	81.5	66.0	70.2	77.3
February	302.5	112.1	77.1	94.4	86.4	125.5	99.1	103.7
March	369.9	139.8	145.4	166.4	128.7	134.4	142.9	145.4
April	406.4	166.4	215.2	178.5	225.1	183.3	193.7	182.2
May	461.1	215.7	160.7	262.6	189.4	192.0	204.1	213.2
June	465.7	206.9	279.4	249.4	268.3	241.8	249.2	248.2
July	470.9	258.1	256.3	282.1	251.6	289.4	267.5	268.0
August	434.5	258.4	250.5	187.1	274.4	252.0	244.5	240.9
September	376.3	172.7	192.3	137.1	136.3	157.3	159.1	183.5
October	340.2	127.9	163.9	112.1	116.6	204.9	145.1	138.7
November	286.9	68.8	51.9	60.5	90.2	91.2	72.5	77.3
December	274.3	70.2	59.4	66.3	58.6	59.6	62.8	62.6
For year	4,474.4	1,860.2	1,936.9	1,852.0	1,907.1	1,997.4	1,910.7	1,941.0
For six months April-September	2,614.9	1,278.2	1,354.4	1,296.8	1,345.1	1,315.8	1,318.1	1,336.0

The year 1928 had 1,860.2 hours of sunshine, 80.8 hours less than the average for the last forty-seven years. The six growing months, April-September, had 1,278.2 hours, or 57.8 hours less than average. Four months were above and eight below normal. August had the greatest departure above with 17.5 hours and June the greatest below normal with 41.3 hours.

PRECIPITATION.—The fall of both rain and snow for the five winter months, including November, 1927, and March, 1928, is given in the following table for five years, together with the average for the forty-seven years, 1882-1928. Ten inches of snow is equivalent to one inch of rain.

Months	1928	1927	1926	1925	1924	1924–1928	1882–1928
	in.	in.	in.	in.	in.	in.	in.
November, 1927:							
Rain	3.85	3.14	2.52	0.96	2.16	2.53	1.99
Snow	8.3	13.8	5.3	6.2	4.2	7.6	7.4
December, 1927:							
Rain	1.52	0.26	0.66	0.94	2.04	1.08	1.26
Snow	17.4	17.1	13.8	13.8	8.6	14.1	15.3
January, 1928:							
Rain	0.49	0.34	0.54	0.03	1.61	0.60	0.85
Snow	19.4	13.9	17.4	18.4	24.0	18.6	18.8
February, 1928:							
Rain	0.74	0.26	0.54	1.56	0.09	0.64	0.72
Snow	12.1	19.0	16.0	10.0	20.9	15.6	15.7
March, 1928:							
Rain	0.84	0.99	0.82	1.67	0.58	0.98	1.17
Snow	17.7	5.9	18.0	11.4	5.4	11.7	10.7
Five months:							
Rain	7.44	4.99	5.08	5.16	6.48	5.83	6.01
Snow	74.9	69.7	70.5	59.8	63.1	67.4	68.0

The total amount of rainfall for the five months was 7.44 inches, or 1.43 inch above the average of the forty-seven years, 1882-1928.

The total amount of snowfall was 74.9 inches, or 6.9 inches above normal.

The rainfall for the six months, April-September, comprising what is regarded as the growing season for most crops, is given in the following table covering the last five years, 1924-1928, and the normal for the forty-seven years, 1882-1928.

Months	1928	1927	1926	1925	1924	1924–1928	1882–1928
	in.	in.	in.	in.	in.	in.	in.
April	1.97	1.19	1.53	1.18	2.05	1.58	1.84
May	1.71	3.92	1.47	1.53	3.52	2.43	2.74
June	3.94	2.94	3.28	3.52	2.37	3.21	2.83
July	4.28	4.36	2.72	3.48	3.47	3.66	2.89
August	3.66	1.94	4.10	1.77	2.78	2.85	2.69
September	3.27	2.33	4.12	4.11	4.11	3.59	2.73
Total for six months	18.83	16.68	17.22	15.59	18.30	17.32	15.72

The rainfall for the six months, April-September, was 18.83 inches, or a little more than two inches more than the preceding year, and in comparison with the forty-seven years 3.10 inches greater. Five months were above and one below the average. May with 1.03 inch below, and July with 1.39 above, had the greatest departures during the growing season.

STATISTICS OF FARM CROPS, 1928

Field Crops	Acres	Production	Bushels per acre	Market Value	
				Total	Per acre
		bush.	bush.	$	$ c.
Fall wheat	693,660	16,766,408	24.2	20,456,753	29.49
Spring Wheat	109,805	2,181,855	19.9	2,599,815	23.68
Oats	2,659,980	93,461,068	35.1	51,912,665	19.52
Barley	615,433	19,944,133	32.4	14,790,285	24.03
Peas	109,887	1,892,588	17.2	2,892,490	26.32
Beans	50,953	873,427	17.1	3,343,825	65.63
Rye	66,307	1,131,172	17.1	1,076,724	16.24
Buckwheat	271,243	5,692,376	21.0	4,638,578	17.10
Flax	7,964	67,441	8.5	141,111	17.72
Corn (in the ear)	110,192	6,921,850	62.8	4,714,511	42.78
Potatoes	181,241	19,791,851	109.2	11,052,928	60.98
Carrots	2,002	317,998	159.0	63,600	31.77
Mangels	33,567	14,738,443	439.0	2,947,689	87.82
Turnips	71,791	34,323,412	478.0	6,864,682	95.62
Sugar Beets	45,294	15,215,990	336.0	2,757,898	60.89
Mixed Grains	905,693	33,691,418	37.2	23,420,648	25.86
		Tons	Tons		
Corn (for silo) green	299,307	2,685,727	8.97	11,199,482	37.42
Hay and Clover	2,811,076	4,455,615	1.59	50,026,378	17.80
Alfalfa	743,230	1,730,135	2.33	20,020,248	26.94
Alsike	155,867	235,325	1.51	2,457,119	15.76
Sweet Clover	413,468	924,608	2.24	7,067,707	17.09
Totals: 1928	10,357,960	.....	.....	244,445,136	23.60
" 1927	10,305,045	.....	.....	256,627,042	24.90

The acreages devoted to other crops in 1928 were as follows:—Orchards, 207,003; strawberries, 7,773; vineyards, 8,855; other small fruits, 12,733; summer fallow, 211,015; pasture (cleared), 3,000,172.

Tobacco.—It is estimated that 33,977 acres were grown in tobacco in 1928, yielding 35,585,848 pounds, or 1,047 per acre. Of this, Essex had 13,876 acres, 15,069,336 pounds, or 1,086 per acre, and Kent had 14,725 acres, 15,593,775 pounds, or 1,059 per acre.

Rape.—The estimate for 1928 was 17,469 acres, of which 6,092 are in Wellington, 2,942 in Grey, and 2,529 in Dufferin.

SPRING SOWING AND VEGETATION

The April Bulletin referred to the mildness of winter. The cover of snow was uneven. In eastern counties and in the north the snow fall was unusually heavy. "In places four feet of snow lay on the ground at the beginning of April." The Bulletin further stated: "The early planted wheat when it appeared from beneath the snow looked very fine, giving promise as a bumper crop with favourable weather conditions." A blizzard on April 8th "ushered in cold windy days delaying spring somewhat later than in 1927." The acreage seeded had "substantially increased." It was noted that "high price of seed had its effect and from several districts complaints were heard of the quality of seed available." The larger acreage had an excellent start. But the May Bulletin emphasized "decidedly backward spring in Eastern Ontario." Farmers estimated "operations to be from ten to twenty days late." Reports from all along the St. Lawrence indicated "seeding fairly well accomplished under exceptionally delayed conditions." Concerning western sections of the Province, reports were better. "The seed bed was in good condition and no noticeable diminution of acreage in any class, seeding being active from May 10 to the finish of operations." It was observed that "barley had an increased proportion of the acreage sown." The green grain reported in May by several correspondents, "had a promising appearance." The late season "meant more buckwheat." It was also noted by correspondents that, "it was not possible everywhere to get enough seed and in some sections oats took the lead on resown land." No injury was reported in the Bulletins from worms or insects.

THE GRAIN CROPS

Fall Wheat.—The April Bulletin recorded "fall conditions generally favourable; only in spots was fall ploughing delayed." It was pointed out that, "the soil was in better condition and had been better ploughed and worked than the preceding year. A great deal of the fall wheat was sown early and the seed bed well prepared. Some of the late-sown wheat, on the other hand, on indifferently prepared land suffered considerable killing out. Estimates of winter killing in the reports varied from 10 to 50 per cent. A rough estimate was one-third late sown fall wheat Only where fall wheat showed lack of covering were there indications of winter injury to early sown fields. A burst of warm weather at the opening of April caused the snow to disappear quickly and involved heavy flooding in some parts, especially east and north." Little heaving was reported. Sandy soil gave the best account of the mild winter. Cold drying winds set in for a spell up to May 15th. On the 19th came "a general downpour of warm rain that brought on vegetation with a rush." It was noted that "weeks of night frosts and drying days had worked a great

deal of harm to fall wheat, reports varying from 25 per cent. to 75 per cent. In such conditions exceptional experiences found place on the record. Fields that came through uninjured "made a fine recovery." But the fall wheat of 1928 was reckoned "not better than half a normal crop, although it had been but little injured by winter conditions." Following the good rain of the 19th May the weather turned again cool and dry. "All over those counties from Essex to Lennox, where the limit of the fall wheat land occurs, the killed out fields were worked over and replanted with spring grain, barley for the most part being drilled in where the land was not ploughed up." The September Bulletin, however, noted that growers had cause for satisfaction at harvesting. All the crop that came through ripened well with favourable weather and as the season advanced to the harvest improvement in the fields was everywhere in evidence. There was very little insect injury, apart from scattered references to the midge. The chief cause of injury had been the recurrence of frosts in spring. In the December Bulletin it was stated "in the western counties fall wheat ranked in quality from second standard to average.

The New Fall Wheat.—The December Bulletin reported the new fall wheat crop in mid-November very similar to the conditions at the same stage in 1927. The mild temperatures stretched out to the 20th without severe frost or snow anywhere, and though the ground was dry and lumpy, more than average acreage had been prepared and sown. Seeding began soon after mid-September and continued with favourable weather till the farmers had all their plans carried out, as late as November 17th. In the western sections of the Province the operations were, as usual, finished about the last week in October, the average seeding time coming between the 5th and 10th of October. Dawson's Golden Chaff, O.A.C. 104, Niagara Red, Michigan Amber were mentioned among the favourite varieties. There was slight increase, if any, in the acreage sown.

Spring Wheat.—There was a low acreage of this crop compared with the average over a period of years. Ninety per cent. of an average crop was attained in but few places and grain was not as plump, generally speaking, as in the preceding year; also a good deal sprouted during harvesting. Lennox and Addington made the most favourable report of spring wheat harvesting. In Frontenac, the crop was a fair average, but farther east the harvest was low as to quality and quantity, the grain having been late, sown in backward spring weather. In some low land the grain was practically lost. Renfrew had a good looking crop, though spoiled considerably by wet weather. It did not thresh out as well as it looked when standing. In Nipissing and Timiskaming the quality was fair, but almost ruined by continuous rain.

Oats.—The crop was harvested from July 25th to August 12th. Good grain was threshed even when the straw had been badly lodged. Generally the grain was bright and straw good. In the central counties fair weather was experienced for cutting from August 1st to the middle of the month. Through Eastern Ontario fields in places were badly beaten down. The damage suffered there or elsewhere was from an unusually wet season.

Barley.—Fine fields were a feature of the harvest all over the Province. The yield as a general estimate was 35 bushels and the date of harvesting the third week of July. Grain was uniformly good and straw bright, though the weather had turned hot at ripening time with thunderstorms that incurred heavy lodging in places. Where grown in Northern Ontario the yield was satisfactory estimated as high as 45 bushels.

Rye.—What was grown promised a fair harvest, looking ready to cut about July 1, though harvesting ran to August 10th. In the wet harvest period some rye was drawn in damp condition to the barns, though conditions generally were fair and the sample good.

Peas.—Peas were not a good crop. The season was too wet and cutting was late. The heavy rain did not allow maturing except on extra good land well drained. Canning peas in Oxford suffered by the excessive rain; the harvest was disappointing. The crop did fairly in Prince Edward.

Buckwheat.—More land was sown to buckwheat, but the crop suffered from the character of the weather. The harvesting period was an improvement on the preceding year.

Beans.—Both in regard to sample and weather for harvesting reports were excellent. The acreage sown was not large. The wet weather of the early summer gave weeds an unusual start and called for heavy work in the fields.

Corn.—Correspondents were not prepared to closely estimate the year's damage by corn borer. Late planting, slow growth in the early stage, and the weather conditions of the early part of the year had to be taken into account. The corn acreage was about double that of the previous year and 10 per cent.to 15 per cent. represented the damage done by the borer. Damage from one cause or another was more noticeable in land not well drained because there had been much wet, cold weather in the early growing season. Production seems to be getting back to an average crop in many districts where the borer has given less evidence of its presence than for a number of years. In the average corn area the borer was distinctly not as bad as in recent years. Some think that the excessive rain of the growing season operated against the borer. The weather of late July and August brought on the crop well.

Tobacco.—Heavy rain storms about August 10th scalded some of the tobacco in Essex, but the general condition of the crop was earlier than usual. The growth had been heavy owing to abundant moisture and warm weather all over the tobacco growing area. On drained land the quality was above average notwithstanding wet weather. Black and flue cured were excellent and burley very good. Rain and wind did not cause more than 10 per cent. injury. The acreage was not larger than average, but production better.

Hay and Clover.—Alfalfa and all clovers fared much the same. In the east and north districts, where the cover of snow remained till the middle of April, clovers came through very well. The spring conditions were especially severe on old seeding of alfalfa. Alfalfa that came through looked very good towards the end of May, but many ploughed up both clover and alfalfa.

Red Clover.—Red clover was severely injured by the spring conditions on low lands.

Alsike.—This crop was hurt more than any other. On low land it looked worse than in the previous experience of most districts.

Sweet Clover.—Though injured like other crops by spring conditions, sweet clover took the place of alsike to a considerable degree.

Clover Seed.—The early condition of the clover crop for seed promised well enough, but not nearly so much was saved as anticipated. The first crop of alfalfa had little seed and the second seemed better filled. The wet weather diminished seed. All clovers were alike in this respect, except sweet clover which in many places gave abundant yield. A correspondent said 75 per cent.

of the clover crop failed for seed in all classes. The midge was not complained of. In Halton, all clovers were poor for seed. In Peel County the crop looked well but had little seed.

POTATOES AND FIELD ROOTS

Potatoes.—Potatoes were a fair crop. Growing of tubers on large scale over a township is going out, and the method of small scale growing makes for greater inequality of varieties and quality in consignments coming on the market. Weather conditions of the 1928 season as in 1927, affected the quality of the crop, which was harvested in time. The early potatoes were the most satisfactory; in the western counties, exceptionally good, free from scab and disease. In Kent the yield, size and quality were all up to average. An Elgin County correspondent reported a wonderful yield for the acreage planted and very little affected by rot. Norfolk growers had the best returns in years. From Welland the report was equally good, no injury from rot, rain or drouth. In Middlesex, the crop was poor on clay land under the heavy rains of June. Rot was noticed in various central counties, and its presence more complained of after storage. A Waterloo County report was of good crop rather badly damaged by rot from heavy rains. In York County districts, producing large quantities, rot was reported as high as 10 per cent. on some soils. On high land the yield and size of tubers were up to average, both in early and late varieties. Brock, in north Ontario, reported an extra good crop and more shipping out than last year. In Prince Edward County some blight appeared and considerable rot. Carleton County experienced a good deal of rot, whilst a report from Renfrew said 50 per cent. of the crop was not fit for storage. The later varieties disclosed more liability to rot. In the northern country most uneven conditions were found.

Turnips.—Turnip growers had as good returns as in 1927. Uninjured and taken inside in fair time except off low land. Huron County reported an extra large production repaying the attention given them. Bruce had a bumper crop that called for late harvesting in some places, but the season remained open and all were got in before the cold weather came. In Middlesex the crop was secured for winter in good condition, large and of good quality. There seems to be a tendency to increase the quantity of this crop in the cattle feeding sections. Turnips are being grown more also as a cash crop. Better results are claimed from the use of scuffler and hoe until the turnips are of good size.

Mangels.—Mangels which generally speaking are grown in Ontario for grower's own use did well. On clay soils the crop does poorly. Lifting was attended to in good time as a rule and all harvested in excellent condition. In Bruce and Grey the crop was fair, though a few reports mentioned excessive rain as the cause of a below average yield. Farmers with silos of capacity neglect roots on account of scarcity of farm labour.

Carrots.—The carrot crop was better attended to and the weather generally favoured it on suitable soils. There was more than average production in Brant and in Peel, production was up to the average mark. Where grown in York County, the crop was good.

Sugar Beets.—An average to light tonnage, high in saccharine. Shipping was attended to in good time and under very fair conditions. In the beet growing sections all operations connected with the crop were completed com-

paratively early. The Agricultural Representative in Essex, described the product as of high percentage in sugar. In Kent, all beets were taken care of early, the harvesting period being excellent from weather standpoint.

MISCELLANEOUS FEATURES

Flax.—The quantity of flax raised would not appear to have increased. Some little flax is grown in Huron County and there it was lodged by the heavy rains and was hard to handle. Little of the crop is grown in Bruce. Waterloo County grows a quantity, and there, as elsewhere, damage was reported from excessive moisture.

Corn Comes Back.—The crop ripened very well. Borer injury was noticeably less. All parts of the Province reported much better corn than in 1927. The crop has come back.

Fall Ploughing.—The fall at times was almost ideal for ploughing and 80 per cent. to 100 per cent. of operations in the field were finished in the western and central counties. Some localities made a late start, but progress was quite rapid as the fall advanced. One feature of the season was the continuation of mild temperatures into the last quarter of November, which allowed eastern farmers whose fall work in other respects pushed early ploughing aside to take it up without disadvantage later on. An Elgin County report said farmers were finished there by November 14th. Tractors were used to about the same extent as in 1927. In Goderich Township, Huron County, 85 per cent. of anticipated acreage had been finished before the middle of November. In Simcoe County, high and dry land had all been ploughed, but low farms were backward, leaving a lot of ploughing to be done. In Middlesex, the work was all well on, with much the same report from Oxford, Brant, Perth, and Wellington. From Eastern Ontario, the majority of reports were in effect that farmers were well on with operations, not much later than the middle of November with acreage above average. A Grenville County report was: "Ploughing completed." In Renfrew, earlier fall ploughing has been retarded by rain, but later progress made up for this by November 15th. The north and west had exceptional rain and in some places the farmers could not get on the land. Nipissing reported less than 25 per cent. of work on the land done.

Threshing and Marketing.—Early threshed wheat was hardly up to average, but was rapidly marketed. A large quantity of the 1928 wheat was put into pool elevators. Little of other grains were sold early. Sale of beans was active and marketable crop quickly done with. Not more than normal percentage of grain remained in the farmer's hands. This portion went into barns in good time. A good deal of the barley grown will be held for feed. More farmers than in past years have tried out barley as a proposition with good results. Buyers are plentiful. A Peterborough County correspondent attributes to sprouting in fall wheat the fact that much of the crop has been left to be threshed after the freeze up. In Northern Ontario, threshing of portion of harvested crop cut was delayed by weather conditions. All grain grown there is used locally. Heavy loss by rains reported.

Farm Improvements.—No exceptional note was made of farm improvements in 1928, beyond a steady increase of under-draining, which is active all over the Province. Very little fencing and not much building reported. In Kent, some new barns are being constructed by tobacco growers. The let-up

on building is attributed to prices of materials and labour. In whatever building has been undertaken, better materials are favoured. A Lambton report which is characteristic of the western counties, allows 1928 the distinction of being the record year in that section for under-drainage. It is suggested by more than one correspondent that the unusual rainfall of several summers past has concentrated the attention of farmers on tile drainage. In Middlesex, more drainage work would have been undertaken if there were more machines available. In Oxford, a correspondent expresses the opinion from personal observation that fencing and farm building are hardly keeping up with the regular processes of deterioration. Farmers who cannot secure necessary labour, allow repair jobs to stand over. In different sections of the Province, activity is noted in rural hydro extension. In the dairying sections east and west, new milk houses are being provided as a feature of the general movement for greater milk production. This activity is being stimulated by emulation for better care of milk.

FRUIT

Apples.—In Elgin the best varieties were few. There was poor set and harvest below average. In Norfolk a short yield, though heavy blossoms of spring had given good promise. Correspondents remark that the Spy did not blossom. All winter varieties scarce. Baldwins a fair crop. Except where well cared for the yield fell short of the preceding year which was lean in respect to culinary varieties. In Welland the agricultural representative reported a fair crop, but scab prevalent. Apples not plentiful in Huron or Lincoln and light in Halton and the Georgian Bay orchards. Few reports of average yield received from Durham and Northumberland. In Prince Edward poor set and attack of pests in a wet season left conditions for only one-third of the average crop.

Plums.—A fair crop and in some orchards light. Elgin County fairly good and Norfolk below average. Haldimand had a heavy yield and Welland, generally speaking, light. Huron produced a medium to good crop, and Lincoln medium, of good quality. Accounts did not vary much in other fruit-growing centres. Halton half the usual crop and Peel a light yield.

Pears.—A fairly good crop with only 10 per cent. scab. Elgin reported average yield, and some Norfolk orchards heavy. Lincoln County orchards produced pears of fine quality, after late blossoming though the crop was not a large one. In Halton also the quantity was below average but quality good.

Peaches.—Only a fair crop. Elgin orchards produced average quantity where grown, and Norfolk a light crop of good quality. Welland said peach moth was numerous and the yield fair. In Lincoln 75 per cent. of an average crop was estimated with no sign of moth in early varieties and prospects of a good crop for late varieties.

Cherries.—Cherries only medium in yield. Many trees showed yellow leaf. The product appeared in seasonable time on the market.

Grapes.—Where grown in Elgin grapes a fair crop to better than average. In Welland yield was abundant and quality good. The agricultural representative estimated injury of whatever kind not over 20 per cent. and fruit all in all excellent. In Lincoln the crop was good, but there were some signs of rot and mildew.

Strawberries.—A light yield generally. The crop was fair to good in Elgin and Norfolk and short to light in Welland, Lincoln, Peel and Halton.

Many plants had been winter killed in the chief growing counties as well as in other districts.

Raspberries.—An abundant yield in every section of the Province found a good market. Blueberries light.

LIVE STOCK

Pasture held as long as in 1927, and with the exception of moderate frosts in September and November of short duration, fall conditions were most favourable. A Bruce County correspondent described pastures as still abundant in the middle of November. In most sections of the Province they had not dried up during the summer. Cattle rather scarce following a period of active market demand both for beef and dairy lines. Sheep, though reported to be on the increase, still far behind the ability of the farms to maintain flocks. A correspondent in western Ontario, estimates ten sheep to 1,000 acres. Hogs are scarce, doubtless as the result of price levels of the former season, but there was in face of this condition a decline from the improvement noted earlier in the summer. Hog cholera made its appearance in Essex. The agricultural representative for the county estimated that 6,000 had been killed. The trouble was reported as effectively checked. Milk cows were scarce. A correspondent in Kent reported beef cattle for winter feeding hard to obtain. There is not more than the usual number of any class of live stock on hand. Horses are not much lower in number. Cows and heifers in feeding sections are being sold to go to districts with markets for milk. Generally speaking, the quality of all live stock has marked an improvement. The number of feeders coming in from the west appears to be normal.

Dairying.—Dairy herds of the Province are changing in correspondence with the steady increase in demand for cream and whole milk. Butter making is on the increase in some sections, but in others, farmers sell the cream or milk and purchase butter. Holsteins are most in favour, but grade Durhams are found to be good milk producers and good stock. The flow of milk in the season under review is said to have made a high record, mainly on account of the condition of the pastures. A Grey County correspondent reports that trucks from seven factories gather cream in the farther townships and many ship as far as Toronto. Butter was a better price throughout the entire year, in some sections of western Ontario, milk, was shipped so close to the volume of production that there was not enough local butter to supply the community. Neither butter nor cheese is made in some localities, whole milk representing the entire dairy industry. This leads a correspondent in Essex, to say: "Our dairy industry is in its infancy." Several correspondents in Essex County, as well as Kent, note that the grade Shorthorns supplies the bulk of the milk in that section. In Bruce, the producers rely on cream supply and are favouring Herefords. A report from Middlesex emphasizes the increasing sale of cream as a factor diminishing dairy butter production.

Poultry.—Poultry accounts kept on the farm are not in line with the increase of flocks. The farm flock is not kept upon a strictly expense basis, but the opinion expressed in reports aside from expense statements, is to the effect that there is fair profit in the industry. The agricultural representative in Essex says the farm flock is one of the most profitable of farm lines. An average report off the farm direct is: "Poultry is a profitable sideline." The loss and annoyance occasioned by chicken thieves increases in spite of the

volumes of complaint directed to it. The thieves are showing expert knowledge of heavy breeds. Prices fair throughout the year, both for poultry and eggs. The weather was not hard and pullets developed very well in the open. All classes looked well when put into winter quarters a little later than usual. At farm auctions, poultry was an active feature. The general improvement in poultry keeping extends to pure-bred flocks, to scientifically constructed poultry houses, culling and feeding. One farmer says poultry are now receiving more methodical attention than any other class of stock and it is only from lack of attention that loss of reasonable profit can arise. Plymouth Rocks, Rhode Island Reds, lead with Leghorns next in order.

FODDER SUPPLIES

There was ample rough feed in the barns of Ontario for the live stock and at least the usual quantities of hay, mixed grains and oats for sale. In the corn section, the improved crop has been a factor of importance. On all this account, there is a natural tendency to stock up with feeders. Alfalfa hay plentiful. Silos as a rule are full. When the cattle come off the pasture they are in fine condition. Concentrates being bought; very little buying of fodder or grain supplies. There will be an increased number of cattle to finish. A Brant correspondent says a large quantity of turnips are being exported to United States. Turnips for sale in Waterloo. In Prince Edward straw sold to the paper mills at Trenton at $30 a ton. The supply of roughage ample; sufficient feed for all live stock throughout northern and northwestern sections.

LABOUR AND WAGES

The farm labour problem has for some years been developing definite regional features. These have, in the main, been created by the local character of production. Not only demand but also rates of wages and nature of contract are affected by local conditions. It means of course, that producers must meet local circumstances. But the supply of labour suffers from an increasing percentage of the unskilled sort. There are two outstanding difficulties in the situation that seems to be making for a deadlock. In the first place, the supply of labour is inadequate and in the second, the farmer feels his financial inability to increase the pay. Where special crops are grown, the supply of labour offered, although unskilled, is more readily absorbed. It is a slower process to adapt the unskilled man to the tasks of mixed farming. Wages are going up in tobacco and bean-growing sections. In the busy season help must be had. Foreign labour is more adaptable to the needs of the specialist than for general farming, because it is required only in summer months. Scandanavians have been employed in greater number and are found to be good workers. On the other hand, in counties where mixed farming is the mainstay, the farmers will go without help even in the busy season, rather than meet the rates of wages demanded by the few labourers available, no matter how inexperienced. No domestic help is obtainable anywhere. Both foreign and English-speaking immigrant women are absorbed in the labour market of the cities. An increasing effect of the scarcity of domestic help on the average Ontario farm is the tendency to buy food for the family after the example of city dwellers. Few suggestions looking to better conditions come from the farmers who take the position, that wages are at the top and that prices for all products must advance before experienced farm help can be commanded in anything like adequate supply.

TEMPERATURE, 1928

TABLE I.—Showing for each month the highest, lowest, mean daily range, and mean temperature at the principal stations in Ontario for 1928; also the annual mean for each station.

Months	Southampton	Chatham	London	Woodstock	Vineland	Toronto	Lindsay	Beatrice	Ottawa	MontrealRiver
	°	°	°	°	°	°	°	°	°	°
January:										
Highest	40.5	52.0	44.0	45.3	45.0	44.0	39.1	38.0	39.0	38.0
Lowest	— 5.2	1.0	—18.0	—17.2	— 6.0	1.2	—19.8	—23.0	—16.5	—37.0
Daily range	11.8	11.7	11.9	11.3	12.4	11.4	16.8	18.7	17.8	29.5
Monthly mean	22.3	25.5	23.1	21.8	26.5	25.2	18.1	15.2	20.2	6.2
February:										
Highest	40.0	57.0	45.0	42.0	48.0	42.5	38.3	37.0	40.5	34.0
Lowest	—10.0	2.0	— 2.0	— 3.5	2.0	— 4.2	—15.1	—27.0	—19.0	—42.0
Daily range	14.5	15.8	14.3	12.1	13.9	13.4	20.3	23.4	20.0	37.0
Monthly mean	20.2	27.3	23.6	21.5	26.4	24.1	16.7	12.8	14.4	2.0
March:										
Highest	54.0	74.0	71.0	63.3	70.0	71.0	56.4	49.0	52.0	54.0
Lowest	— 8.4	9.0	2.0	4.0	8.0	9.0	— 5.8	—21.0	— 5.0	—31.0
Daily range	13.6	18.1	16.8	13.4	16.1	14.0	17.0	18.0	15.9	27.8
Monthly mean	24.9	33.9	29.8	28.0	32.3	30.6	23.9	21.0	25.0	16.5
April:										
Highest	72.5	74.0	73.0	72.5	80.0	71.5	70.7	68.0	75.0	62.0
Lowest	15.2	23.0	19.0	20.0	23.0	22.6	12.1	1.0	14.5	— 9.0
Daily range	16.3	20.0	19.3	17.0	18.8	16.5	20.4	21.4	17.1	27.3
Monthly mean	36.8	44.2	41.8	40.1	43.7	41.6	38.6	35.0	36.6	30.7
May:										
Highest	81.0	85.0	85.0	81.8	86.0	82.4	88.0	82.0	82.0	79.0
Lowest	25.6	31.0	28.0	29.0	32.0	33.0	28.0	22.0	32.0	23.0
Daily range	18.5	26.1	25.2	22.1	21.7	19.9	26.5	25.1	20.8	27.7
Monthly mean	47.7	57.2	54.1	52.6	54.0	54.1	54.2	49.1	54.5	47.5
June:										
Highest	84.2	83.0	82.0	80.0	89.0	80.9	85.6	82.0	84.0	84.0
Lowest	35.3	40.0	34.0	35.0	40.0	38.5	32.0	31.0	41.0	30.0
Daily range	21.8	18.5	18.6	18.6	19.2	18.0	22.6	24.5	20.1	30.6
Monthly mean	58.4	63.4	61.7	60.8	61.5	61.5	60.8	58.9	62.3	56.5
July:										
Highest	89.2	92.0	91.0	85.0	93.0	90.0	92.2	89.0	89.0	89.0
Lowest	46.2	51.0	48.0	48.0	52.0	52.0	45.0	40.0	50.5	36.0
Daily range	18.0	21.1	20.7	17.1	17.6	19.0	22.6	22.0	19.3	28.5
Monthly mean	65.6	72.7	70.3	67.6	71.8	69.9	67.8	65.0	69.7	62.8
August:										
Highest	85.5	93.0	90.0	85.0	91.0	89.8	88.1	84.0	92.0	90.0
Lowest	45.2	48.0	44.0	47.0	48.0	51.7	46.2	39.0	50.7	34.0
Daily range	18.1	23.0	22.8	18.3	17.9	19.2	22.2	22.8	20.7	32.0
Monthly mean	66.1	73.7	70.1	67.9	71.8	70.5	67.7	64.2	70.3	61.4
September:										
Highest	81.2	89.0	87.0	81.3	87.0	80.2	78.6	73.0	80.0	76.0
Lowest	33.9	32.0	31.0	33.5	34.0	33.0	30.5	29.0	33.0	25.0
Daily range	18.4	22.2	21.5	16.7	18.7	17.8	20.3	20.4	18.3	24.3
Monthly mean	55.7	61.2	57.4	55.5	60.4	57.7	54.7	51.1	55.7	48.5
October:										
Highest	79.8	76.9	76.4	74.4	77.6	73.9	74.3	72.4	72.4	73.1
Lowest	24.1	23.0	27.0	20.0	25.0	23.2	17.5	11.0	19.0	13.0
Daily range	16.5	18.8	17.7	14.6	16.6	16.0	19.6	17.6	19.2	19.0
Monthly mean	50.1	55.6	50.9	50.8	53.5	50.8	48.3	45.5	48.1	41.8
November:										
Highest	60.3	70.0	66.0	64.8	66.0	65.0	63.7	58.0	64.5	53.0
Lowest	16.7	20.0	15.0	14.0	20.0	16.0	6.0	— 3.0	12.5	— 4.0
Daily range	11.2	12.2	10.5	8.7	11.7	11.0	14.4	14.2	13.1	16.2
Monthly mean	38.1	42.0	39.2	38.6	42.7	39.7	34.3	31.7	34.2	28.6
December:										
Highest	44.2	54.0	48.0	46.3	50.0	46.6	44.6	41.0	45.5	41.0
Lowest	4.2	8.0	3.0	1.5	9.0	13.4	— 0.2	— 7.0	— 4.0	—13.0
Daily range	9.7	13.6	10.5	9.1	10.4	9.3	13.2	13.9	13.2	17.9
Monthly mean	30.2	33.0	29.8	29.6	34.2	32.8	27.0	24.3	25.0	20.6
Annual mean	43.0	49.1	46.0	44.5	48.2	46.5	42.6	39.5	46.0	35.3

AVERAGE TEMPERATURE FOR FORTY-SEVEN YEARS

TABLE II.—Showing for each month the monthly average for the highest, lowest, mean daily range and mean temperature at the principal stations in Ontario, derived from the forty-seven years, 1882-1928; also the annual mean at each station for the same period.

Months	Southampton	Chatham	London	Woodstock	Vineland	Toronto	Lindsay	Beatrice	Ottawa	MontrealRiver
	°	°	°	°	°	°	°	°	°	°
January:										
Highest	44.0	46.1	45.8	45.3	49.0	45.1	41.2	40.6	40.2	37.9
Lowest	— 7.6	— 7.7	— 9.7	—10.7	— 5.1	— 7.2	—20.4	—27.4	—21.5	—34.2
Daily range	14.5	12.4	15.1	15.6	14.5	14.5	18.1	20.6	17.8	24.4
Monthly mean	20.7	22.0	21.4	20.1	24.5	22.4	15.7	13.9	11.4	6.3
February:										
Highest	43.5	48.7	46.3	45.1	47.6	44.9	41.6	41.7	40.1	40.9
Lowest	—11.4	— 7.9	— 9.9	—10.4	— 5.6	— 6.7	—17.6	—26.6	—20.1	—34.0
Daily range	16.6	14.0	16.5	16.3	15.2	15.1	19.6	22.1	18.9	24.6
Monthly mean	18.9	21.4	20.6	19.4	23.0	21.5	15.6	13.6	12.7	8.9
March:										
Highest	54.9	60.0	59.9	57.2	60.4	57.1	53.2	51.5	50.2	51.7
Lowest	— 2.7	1.4	0.4	0.0	5.7	4.4	— 6.5	—12.8	— 7.6	—22.7
Daily range	16.8	15.4	17.7	16.7	15.2	14.6	18.9	20.9	17.6	25.4
Monthly mean	27.1	30.8	30.2	28.4	32.5	30.2	25.8	23.7	24.7	20.4
April:										
Highest	72.5	77.2	76.3	74.3	76.8	71.3	73.9	71.0	73.7	72.4
Lowest	15.7	18.9	18.3	17.5	20.5	20.8	13.9	10.0	15.2	4.9
Daily range	17.6	18.6	20.8	19.8	17.5	16.9	21.1	21.2	19.4	24.3
Monthly mean	40.2	44.1	43.4	42.2	44.0	42.7	41.4	39.1	41.2	37.8
May:										
Highest	79.5	83.4	83.3	80.5	84.3	80.4	82.9	80.7	82.9	84.1
Lowest	28.3	29.6	29.2	29.1	32.8	32.0	27.7	26.1	31.0	19.6
Daily range	18.5	21.3	23.2	21.7	20.3	19.3	24.1	23.2	22.0	26.3
Monthly mean	51.1	55.4	55.1	53.4	54.3	53.8	53.7	51.8	54.8	51.2
June:										
Highest	85.1	89.4	89.3	86.5	91.1	87.8	88.9	86.5	88.1	90.0
Lowest	37.3	38.5	38.0	38.3	41.1	42.0	37.9	35.5	41.6	33.3
Daily range	20.0	22.0	23.6	22.2	21.4	20.4	24.8	24.4	21.6	27.6
Monthly mean	60.3	65.1	64.8	63.2	65.0	64.0	63.4	61.8	64.5	61.3
July:										
Highest	87.4	93.0	92.7	89.4	92.6	91.3	91.7	89.4	91.0	91.9
Lowest	43.9	44.7	44.2	44.5	48.1	48.8	43.5	42.1	48.2	40.0
Daily range	20.0	22.2	23.4	22.4	21.3	20.3	24.7	23.4	20.8	26.0
Monthly mean	66.1	69.8	69.4	67.6	70.9	69.2	67.8	66.3	68.9	65.4
August:										
Highest	85.9	91.1	91.0	88.2	92.7	89.0	89.8	87.5	88.9	88.4
Lowest	41.9	43.2	41.1	41.7	45.6	46.6	40.5	37.8	44.0	36.7
Daily range	18.2	21.4	23.7	23.1	21.0	21.7	24.3	23.2	20.9	25.3
Monthly mean	64.5	67.7	66.8	65.1	68.8	66.2	65.4	63.9	66.1	62.3
September:										
Highest	84.0	88.0	87.1	84.6	89.2	85.4	85.4	82.8	84.4	83.2
Lowest	34.5	34.9	32.3	32.4	36.1	36.7	31.6	30.2	33.4	28.9
Daily range	18.1	20.0	22.4	21.3	20.4	18.7	22.8	21.6	20.4	23.5
Monthly mean	59.0	61.8	60.7	59.0	62.4	60.5	58.3	57.2	58.3	55.0
October:										
Highest	74.6	76.9	76.4	74.4	77.6	73.9	74.3	72.4	72.4	73.1
Lowest	26.0	26.1	24.4	24.2	26.5	27.2	21.6	21.0	24.4	17.9
Daily range	16.0	17.4	20.1	18.8	18.7	16.5	19.9	18.9	17.6	19.7
Monthly mean	48.2	50.0	48.5	47.3	50.6	48.8	46.3	45.6	46.1	43.0
November:										
Highest	61.1	63.3	62.1	61.2	65.0	60.7	59.5	58.4	58.4	55.2
Lowest	14.8	15.0	13.7	12.6	17.8	16.0	6.9	6.2	7.7	— 1.0
Daily range	13.2	12.5	14.5	14.3	14.0	12.7	15.1	14.6	12.5	15.1
Monthly mean	36.8	37.8	36.9	35.7	39.5	37.7	33.8	33.0	32.8	29.1
December:										
Highest	49.2	50.0	52.5	49 2	53.5	49.0	45.7	44.7	43.1	43.2
Lowest	0.8	0.8	— 1.5	— 2.6	— 0.4	0.1	—12.5	—15.2	—14.4	—24.8
Daily range	12.4	10.8	13.2	13.2	12.7	12.5	15.8	17.1	14.7	19.4
Monthly mean	26.7	27.0	26.5	25.1	29.0	27.5	21.4	20.3	18.0	14.0
Annual mean	43.3	46.1	45.4	43.9	47.0	45.4	42.4	40.9	41.7	37.9

RAIN AND SNOW

TABLE III.—Summary of the total fall of rain and snow and the number of days on which rain and snow fell in Ontario during 1928, at stations reporting the whole year, and the average of the Province.

Stations	Rain		Snow	
	Inches	Days	Inches	Days
ALGOMA:				
Biscotasing	29.90	80	49.1	37
Kapuskasing	24.40	106	80.6	54
Michipicoten	34.14	97	75.0	60
Steep Hill Falls	37.28	82	106.4	40
BRANT:				
Brantford	28.63	125	29.1	31
Paris	32.33	114	38.3	24
BRUCE:				
Southampton	35.67	134	102.3	76
Walkerton	38.78	99	157.0	47
Wiarton	33.42	100	174.0	54
CARLETON:				
Ottawa	31.59	123	98.0	67
DUNDAS:				
Morrisburg	33.66	94	91.5	45
DURHAM:				
Orono	28.81	104	36.7	29
ELGIN:				
St. Thomas	31.95	102	25.6	17
ESSEX:				
Harrow	14.86	82	30.6	22
Leamington	25.59	76	13.0	7
Windsor	22.81	79	13.9	20
FRONTENAC:				
Kingston	32.36	122	30.5	36
GREY:				
Eugenia	26.61	65	85.5	28
HALTON:				
Georgetown	32.34	81	31.9	33
HASTINGS:				
Belleville	29.04	112	31.4	17
Queensboro	30.18	113	86.0	25
Trenton	29.96	97	55.4	30
HURON:				
Brucefield	31.86	95	48.5	26
Ridgecrest	33.82	130	53.1	34
KENT:				
Chatham	24.53	74	21.0	13
LEEDS:				
Brockville	28.08	60	26.5	18
LINCOLN:				
St. Catharines	27.21	100	33.9	26
Vineland	29.73	108	30.4	20
MANITOULIN:				
Providence Bay	20.15	47	73.4	30
MIDDLESEX:				
London	33.76	126	99.0	58
Lucan	32.34	110	95.5	44
MUSKOKA:				
Beatrice	41.10	117	13.90	45
NIPISSING:				
Iroquois Falls	28.44	106	83.7	63
Montreal River	30.06	126	120.6	64
New Liskeard	29.25	99	65.5	57
North Bay	33.13	112	79.9	54
Rutherglen	28.61	103	139.5	51
NORFOLK:				
Simcoe	31.06	134	34.5	28
NORTHUMBERLAND:				
Healy Falls	30.42	105	59.1	28
OXFORD:				
Woodstock	31.30	117	55.3	57
PARRY SOUND:				
Magnetawan	39.92	120	148.5	67
Nipissing	30.73	111	120.5	53
Parry Sound	36.40	133	128.5	67
PEEL:				
Alton	26.78	80	93.0	33
PERTH:				
Stratford	31.54	107	88.3	43
PETERBOROUGH:				
Apsley	34.09	119	112.5	45
Lakefield	26.80	82	75.8	30
Peterborough	27.56	111	81.4	42
PRINCE EDWARD:				
Bloomfield	28.40	91	28.8	29
RAINY RIVER:				
Emo	21.37	71	54.5	21
Fort Frances	21.64	64	42.4	20
Kenora	19.96	38	47.5	24
Mine Centre	24.67	90	47.7	42
Sioux Lookout	16.55	63	41.9	23
RENFREW:				
Clontarf	21.46	72	107.5	36
Pembroke	27.09	111	78.1	39
Renfrew	19.08	94	81.4	31
SIMCOE:				
Beeton	31.39	59	35.7	23
Orillia	30.23	131	129.5	64
Wasago	35.38	150	133.8	53
SUDBURY:				
Chapleau	31.96	98	72.2	41
Coniston	30.29	92	97.3	35
Sudbury	24.95	80	89.9	41
Timmins	24.98	98	67.6	50
THUNDER BAY:				
Kakabeka Falls	20.78	94	39.0	25
Port Arthur	22.17	84	29.5	32
Savanne	19.11	62	40.2	34
Schreiber	22.09	82	38.5	27
VICTORIA:				
Fenelon Falls	27.08	124	115.3	59
Lindsay	25.61	92	105.3	63
WATERLOO:				
Kitchener	24.15	83	61.3	38
WELLAND:				
Welland	28.39	105	33.0	32
WELLINGTON:				
Guelph	28.40	72	58.5	26
WENTWORTH:				
Hamilton	25.82	60	28.1	15
YORK:				
Agincourt	27.65	107	37.5	36
Toronto	32.00	129	33.5	51
Average for the Province: 1928	27.75	94	70.3	37
1927	26.02	87	66.3	34
1926	25.89	81	95.4	48
1882–1928	24.39	74	72.4	39

RAIN AND SNOW

TABLE IV.—Monthly summary of inches of rain and snow in precipitation in the several districts in Ontario in 1928, also the average derived from the forty-seven years, 1882-1928.

Months	West and Southwest		North and Northwest		Centre		East and Northeast		The Province	
	Rain	Snow	Rain	Snow	Rain	Snow	Rain	Snow	Rain	Snow
1928	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
January	0.73	20.1	0.05	17.4	0.65	20.0	0.53	20.1	0.49	19.4
February	0.97	11.2	0.02	9.3	1.00	13.3	0.97	14.5	0.74	12.1
March	0.88	17.0	0.24	14.5	0.99	19.0	1.23	20.4	0.84	17.7
April	1.97	3.6	1.07	11.9	2.43	5.3	2.39	3.8	1.97	6.1
May	1.94	.....	1.59	.02	1.36	.....	1.95	.....	1.71	0.1
June	4.22	.....	4.28	.....	4.46	.....	2.79	.....	3.94	.....
July	4.34	.....	4.16	.....	4.61	.....	4.03	.....	4.28	.....
August	2.64	.....	4.06	.....	3.85	.....	4.08	.....	3.66	.....
September	2.67	S	3.72	0.7	3.83	S	2.87	.....	3.27	0.2
October	3.63	0.7	4.05	0.7	4.44	0.2	4.24	S	4.09	0.4
November	3.03	6.5	0.89	5.0	2.88	7.0	2.46	5.2	2.31	5.9
December	1.08	6.3	0.21	8.1	0.93	22.3	0.91	6.1	0.74	10.7
The year	28.10	65.4	24.34	67.8	31.43	87.1	28.45	70.1	28.04	72.6
1882–1928										
January	1.09	16.2	0.56	22.8	0.97	16.7	0.87	19.7	0.87	18.8
February	1.07	13.8	0.36	18.3	0.84	14.3	0.60	16.7	0.72	15.7
March	1.40	8.7	0.84	13.0	1.29	9.8	1.15	11.5	1.17	10.7
April	2.11	2.1	1.52	4.4	2.04	2.9	1.73	3.8	1.82	3.3
May	3.06	0.1	2.47	0.2	2.76	S	2.66	0.1	2.74	0.1
June	2.95	.....	2.74	.....	2.81	.....	2.82	.....	2.83	.....
July	2.79	.....	3.00	.....	2.91	.....	2.88	.....	2.89	.....
August	2.78	.....	2.84	.....	2.47	.....	2.66	.....	2.69	.....
September	2.74	S	3.07	S	2.49	S	2.62	S	2.73	S
October	2.73	0.8	2.82	2.3	2.59	0.6	2.56	1.0	2.67	1.2
November	2.30	5.3	1.71	11.9	2.05	5.1	1.94	7.2	2.00	7.4
December	1.96	14.2	0.74	20.4	1.18	12.1	1.08	14.0	1.24	15.2
The year	26.98	61.2	22.67	93.3	24.40	61.5	23.57	74.0	24.37	72.4

SUNSHINE

TABLE V.—Monthly summary of bright sunshine at the principal stations in Ontario for 1928, showing the number of hours the sun was above the horizon, the hours of registered sunshine, the total for the year, and the average derived from the forty-seven years, 1882-1928.

Months	Sun above horizon	Woodstock	Toronto	Lindsay	Kingston	Ottawa	Average of five stations		
							1928	1927	1882–1928
1928	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.	hrs.
January	285.7	53.8	79.3	55.6	57.2	70.1	63.2	84.8	.....
February	302.5	105.6	119.6	101.7	119.7	114.1	112.1	77.1	.....
March	369.9	127.9	162.6	112.4	147.2	148.7	139.8	145.4	.....
April	406.4	171.0	195.6	150.4	176.6	138.3	166.4	215.2	.....
May	461.1	254.9	236.2	169.5	221.8	196.3	215.7	160.7	.....
June	465.7	197.9	221.1	195.1	206.0	214.6	206.9	279.4	.....
July	470.9	273.1	272.3	215.9	260.8	268.4	258.1	256.3	.....
August	434.5	260.6	280.9	224.9	262.3	263.2	258.4	250.5	.....
September	376.3	177.7	209.4	146.9	167.4	162.2	172.7	192.3	.....
October	340.2	133.3	149.9	97.2	141.0	118.2	127.9	163.9	.....
November	286.9	57.1	68.2	44.5	87.8	86.2	68.8	51.9	.....
December	274.3	61.4	75.6	64.6	82.1	67.5	70.2	59.4	.....
The year	4,474.4	1,874.3	2,070.7	1,578.7	1,929.9	1,847.8	1,860.2	1,936.9	.....
1882–1928									
January	.....	66.1	78.3	74.4	78.8	88.8	.....	.....	77.3
February	.....	90.7	106.8	99.2	109.5	112.3	.....	.....	103.7
March	.....	127.5	154.7	143.8	146.9	154.4	.....	.....	145.4
April	.....	170.1	189.9	178.1	181.4	191.6	.....	.....	182.2
May	.....	213.1	224.7	205.1	209.6	213.4	.....	.....	213.2
June	.....	252.7	263.5	234.3	249.7	240.8	.....	.....	248.2
July	.....	276.0	284.7	248.3	270.8	260.2	.....	.....	268.0
August	.....	236.1	253.4	223.9	247.9	243.2	.....	.....	240.9
September	.....	176.2	205.2	179.1	182.2	174.8	.....	.....	183.5
October	.....	145.8	153.1	127.3	134.1	133.2	.....	.....	138.7
November	.....	75.0	82.3	68.3	79.0	81.8	.....	.....	77.3
December	.....	55.5	65.6	56.3	68.3	67.1	.....	.....	62.6
The year	.....	1,884.8	2,062.2	1,838.2	1,958.2	1,961.6	.....	.....	1,941.0

RURAL AREA ASSESSED

TABLE VI.—Showing by County Municipalities the rural area of Ontario as returned by Municipal Assessors for 1928 to the Bureau of Municipal Affairs.

Counties and Districts	Acres of Assessed Land			Acres Cleared			Per cent. cleared
	Resident	Non-resident	Total	Resident	Non-resident	Total	
Algoma	277,904	56,589	334,493	63,610	2,928	66,538	19.89
Brant	215,711	15	215,726	179,367	15	179,382	83.15
Bruce	926,456	7,855	934,311	583,601	.....	583,601	62.46
Carleton	552,768	11,581	564,349	378,876	7,119	385,995	68.40
Cochrane	122,554	49,493	172,047	16,700	4,314	21,014	12.21
Dufferin	355,896	.....	355,896	285,367	.....	285,367	80.18
Dundas	236,198	.....	236,198	187,166	.....	187,166	79.24
Durham	366,254	3,317	369,571	308,941	1,864	310,805	84.10
Elgin	436,433	90	436,523	366,466	90	366,556	83.97
Essex	414,861	6	414,867	374,566	6	374,572	90.29
Frontenac	620,426	66,186	686,612	233,319	17,128	250,447	36.48
Glengarry	287,638	925	288,563	201,271	590	201,861	69.95
Grenville	269,017	3,086	272,103	186,849	300	187,149	68.78
Grey	1,064,382	678	1,065,060	700,952	91	701,043	65.82
Haldimand	277,675	4,307	281,982	244,426	2,853	247,279	87.69
Haliburton	538,346	45,185	583,531	45,774	5,811	51,585	8.84
Halton	216,070	8,475	224,545	169,639	2,878	172,517	76.83
Hastings	1,003,390	87,225	1,090,615	418,342	5,396	423,738	38.85
Huron	788,625	10,190	798,815	669,579	9,574	679,153	85.02
Kenora	76,358	14,108	90,466	8,676	1,203	9,879	10.92
Kent	560,738	6,704	567,442	491,352	5,428	496,780	87.55
Lambton	661,405	406	661,811	542,564	.....	542,564	81.98
Lanark	662,980	10,339	673,319	340,219	3,814	344,033	51.10
Leeds	467,282	3,421	470,703	272,617	823	273,440	58.09
Lennox & Addington	427,390	6,677	434,067	254,388	609	254,997	58.75
Lincoln	188,450	1,104	189,554	164,185	976	165,161	87.13
Manitoulin	262,770	84,180	346,950	48,855	1,593	50,448	14.54
Middlesex	743,060	13,608	756,668	668,333	5,990	674,323	89.12
Muskoka	531,627	37,616	569,243	70,971	1,917	72,888	12.80
Nipissing	287,667	18,054	305,721	65,278	2,875	68,153	22.29
Norfolk	390,181	5,500	395,681	280,814	3,276	284,090	71.80
Northumberland	434,897	1,757	436,654	361,045	34	361,079	82.69
Ontario	505,135	1,540	506,675	386,069	5	386,074	76.20
Oxford	468,874	2,602	471,476	402,314	1,881	404,195	85.73
Parry Sound	545,503	94,051	639,554	87,120	4,759	91,879	14.37
Peel	287,828	61	287,889	261,915	1,119	263,034	91.37
Perth	512,183	6,965	519,148	454,172	3,889	458,061	88.23
Peterborough	561,595	21,224	582,819	258,060	7,972	266,032	45.65
Prescott	289,165	2,485	291,650	220,732	1,304	222,036	76.13
Prince Edward	234,232	654	234,886	197,722	.....	197,722	84.18
Rainy River	274,298	95,242	369,540	46,906	7,031	53,937	14.60
Renfrew	1,030,874	55,713	1,086,587	390,251	14,205	404,456	37.22
Russell	247,715	3,095	250,810	168,920	11	168,931	67.35
Simcoe	943,431	14,464	957,895	685,080	9,469	694,549	72.51
Stormont	245,847	2,500	248,347	166,001	500	166,501	67.04
Sudbury	288,334	114,222	402,556	68,422	9,681	78,103	19.40
Thunder Bay	430,785	42,622	473,407	44,313	4,865	49,178	10.39
Timiskaming	237,618	65,810	303,428	65,180	7,621	72,801	23.99
Victoria	589,156	9,325	598,481	292,295	3,150	295,445	49.37
Waterloo	305,137	1,157	306,294	254,236	894	255,130	83.30
Welland	219,553	3,083	222,636	181,317	2,423	183,740	82.53
Wellington	622,883	4,713	627,596	507,696	2,830	510,526	81.35
Wentworth	268,241	.....	268,241	212,040	.....	212,040	79.05
York	530,865	952	531,817	444,057	409	444,466	83.57
The Province:							
1928	24,304,661	1,101,157	25,405,818	14,978,926	173,513	15,152,439	59.64
1927	24,325,197	1,033,523	25,358,720	14,957,087	180,115	15,137,202	59.69
1926	24,307,909	1,044,164	25,352,073	14,954,355	161,027	15,115,382	59.62

NOTE.—Statistics regarding non-resident lands which should include unoccupied lands assessable are not satisfactory, as many assessors do not make any distinction on their rolls.

FALL WHEAT AND SPRING WHEAT

TABLE VII.—Showing by County Municipalities of Ontario the area, produce and market value of Fall Wheat and Spring Wheat for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Fall Wheat				Spring Wheat			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	330	7,788	23.6	9,735	1,014	21,700	21.4	26,040
Brant	14,592	345,830	23.7	423,296	171	3,403	19.9	4,084
Bruce	29,605	778,612	26.3	949,907	1,249	24,980	20.0	29,551
Carleton	267	4,646	17.4	5,575	5,117	96,711	18.9	115,666
Cochrane	42	840	20.0	1,050	113	2,486	22.0	2,859
Dufferin	2,277	55,103	24.2	68,383	1,509	32,293	21.4	38,622
Dundas	90	1,890	21.0	2,363	1,759	36,235	20.6	43,120
Durham	11,290	273,218	24.2	330,047	4,455	82,418	18.5	97,253
Elgin	25,858	550,775	21.3	663,133	325	6,500	20.0	7,963
Essex	38,725	952,635	24.6	1,132,683	1,620	32,400	20.0	38,102
Frontenac	172	3,784	22.0	4,605	1,719	33,005	19.2	39,276
Glengarry	186	3,348	18.0	4,185	2,927	47,417	16.2	56,900
Grenville	58	1,044	18.0	1,253	787	16,291	20.7	19,223
Grey	25,798	704,285	27.3	857,819	3,368	71,065	21.1	84,852
Haldimand	17,853	344,563	19.3	433,116	1,572	29,082	18.5	35,655
Haliburton	36	720	20.0	864	170	2,856	16.8	3,427
Halton	8,435	199,910	23.7	246,489	1,282	28,845	22.5	34,614
Hastings	4,148	94,989	22.9	114,937	1,302	26,170	20.1	31,011
Huron	34,089	893,132	26.2	1,094,087	2,437	52,152	21.4	62,009
Kenora	12	240	20.0	288	47	1,175	25.0	1,351
Kent	63,912	1,578,626	24.7	1,888,037	4,890	102,690	21.0	119,839
Lambton	38,353	866,778	22.6	1,061,803	978	18,973	19.4	22,768
Lanark	265	6,042	22.8	7,250	4,081	90,190	22.1	108,228
Leeds	349	8,830	25.3	11,126	1,234	25,791	20.9	31,981
Lennox & Add'gton	902	18,852	20.9	22,434	2,037	42,777	21.0	51,418
Lincoln	11,706	180,272	15.4	222,456	277	5,263	19.0	6,447
Manitoulin	128	2,816	22.0	3,379	760	16,264	21.4	19,192
Middlesex	50,575	1,208,743	23.9	1,498,841	898	19,038	21.2	22,712
Muskoka	23	414	18.0	518	207	4,181	20.2	5,172
Nipissing	13	260	20.0	325	416	9,110	21.9	10,750
Norfolk	22,126	469,071	21.2	571,328	238	4,760	20.0	5,950
Northumberland	11,658	272,797	23.4	335,268	4,407	87,259	19.8	103,751
Ontario	15,790	423,172	26.8	517,116	3,496	74,814	21.4	87,607
Oxford	28,818	734,859	25.5	887,710	171	3,625	21.2	4,259
Parry Sound	9	180	20.0	225	273	5,733	21.0	6,880
Peel	13,879	319,217	23.0	396,787	3,075	64,575	21.0	77,877
Perth	23,113	587,070	25.4	728,554	493	10,057	20.4	12,179
Peterborough	12,832	345,181	26.9	417,324	2,085	41,283	19.8	47,971
Prescott	61	1,098	18.0	1,373	2,276	44,154	19.4	55,193
Prince Edward	3,551	74,926	21.1	87,738	682	13,094	19.2	14,914
Rainy River	5	118	23.5	146	437	9,658	22.1	11,686
Renfrew	339	6,305	18.6	7,566	23,078	410,788	17.8	486,784
Russell	110	1,980	18.0	2,376	2,464	42,134	17.1	50,561
Simcoe	69,365	1,761,871	25.4	2,158,292	1,614	31,796	19.7	38,441
Stormont	125	2,713	21.7	3,256	860	17,372	20.2	20,673
Sudbury	29	580	20.0	725	1,134	24,268	21.4	29,122
Thunder Bay	40	880	22.0	1,056	687	15,664	22.8	18,014
Timiskaming	25	595	23.8	744	1,831	42,479	23.2	52,037
Victoria	12,306	307,650	25.0	365,488	2,517	48,326	19.2	56,058
Waterloo	23,420	620,630	26.5	755,927	125	2,650	21.2	3,167
Welland	19,409	324,130	16.7	399,652	347	6,558	18.9	7,981
Wellington	10,880	300,288	27.6	370,555	2,995	67,987	22.7	80,633
Wentworth	11,531	244,457	21.2	301,904	571	12,162	21.3	14,716
York	34,150	877,655	25.7	1,085,659	5,228	119,198	22.8	143,276
The Province:								
1928	693,660	16,766,408	24.2	20,456,753	109,805	2,181,855	19.9	2,599,815
1927	751,377	19,447,536	25.9	24,254,806	119,580	2,408,055	20.1	2,939,777

OATS AND BARLEY

TABLE VIII.—Showing by County Municipalities of Ontario the area, produce and market value of Oats and Barley for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Oats				Barley			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	9,425	337,415	35.8	217,970	2,910	96,321	33.1	80,910
Brant	31,552	1,224,218	38.8	646,387	5,953	202,997	34.1	147,782
Bruce	102,165	3,718,806	36.4	2,030,468	22,199	730,347	32.9	544,109
Carleton	78,516	2,245,558	28.6	1,369,790	17,888	454,355	25.4	363,484
Cochrane	2,566	72,618	28.3	47,928	554	12,908	23.3	10,326
Dufferin	55,856	1,804,149	32.3	938,157	21,415	719,544	33.6	504,400
Dundas	21,173	656,363	31.0	435,825	5,998	165,545	27.6	148,991
Durham	44,377	1,437,815	32.4	789,360	10,282	311,545	30.3	236,774
Elgin	58,209	2,153,733	37.0	1,167,323	7,861	271,991	34.6	197,465
Essex	85,513	3,420,520	40.0	1,730,783	23,276	847,246	36.4	593,072
Frontenac	34,042	1,154,024	33.9	632,405	3,508	98,224	28.0	75,829
Glengarry	40,498	882,856	21.8	595,045	8,237	168,859	20.5	151,973
Grenville	29,674	961,438	32.4	624,935	3,334	102,687	30.8	86,052
Grey	131,233	4,632,525	35.3	2,455,238	34,463	1,126,940	32.7	813,651
Haldimand	45,832	1,457,458	31.8	741,846	5,608	155,902	27.8	116,459
Haliburton	7,530	231,924	30.8	138,227	959	23,687	24.7	20,134
Halton	29,574	1,132,684	38.3	611,649	8,318	308,598	37.1	236,077
Hastings	84,919	2,819,311	33.2	1,640,839	16,835	476,431	28.3	370,663
Huron	117,642	4,635,095	39.4	2,414,884	32,628	1,128,929	34.6	798,153
Kenora	1,531	76,550	50.0	45,930	605	21,175	35.0	15,881
Kent	77,523	3,147,434	40.6	1,567,422	31,704	1,090,618	34.4	754,708
Lambton	98,192	3,387,624	34.5	1,734,463	18,346	594,410	32.4	416,087
Lanark	42,114	1,452,933	34.5	897,913	7,838	253,167	32.3	204,053
Leeds	47,468	1,680,367	35.4	1,019,983	3,762	120,008	31.9	99,367
Lennox & Add'gton	43,379	1,483,562	34.2	851,565	7,869	229,775	29.2	185,199
Lincoln	28,784	1,111,062	38.6	595,529	2,462	77,553	31.5	59,716
Manitoulin	5,089	178,115	35.0	109,541	2,138	72,264	33.8	60,702
Middlesex	115.140	4,087,470	35.5	2,137,747	17,023	571,973	33.6	414,108
Muskoka	11,600	381,640	32.9	246,921	888	25,663	28.9	21,377
Nipissing	13,101	374,689	28.6	225,563	2,760	67,896	24.6	56,557
Norfolk	43,269	1,419,223	32.8	762,123	3,122	90,226	28.9	66,857
Northumberland	66,298	2,247,502	33.9	1,317,036	11,496	347,179	30.2	260,037
Ontario	62,226	2,252,581	36.2	1,234,414	21,804	760,960	34.9	552,457
Oxford	68,270	2,607,914	38.2	1,450,000	10,818	372,139	34.4	275,011
Parry Sound	16,632	530,561	31.9	342,212	2,789	83,670	30.0	72,040
Peel	43,840	1,670,304	38.1	906,975	14,135	455,147	32.2	334,533
Perth	92,547	3,507,531	37.9	1,953,695	27,317	997,071	36.5	717,891
Peterborough	52,528	1,717,666	32.7	1,025,447	9,932	318,817	32.1	251,228
Prescott	47,072	1,322,723	28.1	843,897	9,499	246,974	26.0	238,083
Prince Edward	26,226	902,174	34.4	491,685	10,011	290,319	29.0	220,642
Rainy River	7,179	274,956	38.3	173,772	2,375	70,538	29.7	54,596
Renfrew	70,864	2,175,525	30.7	1,255,278	12,282	362,319	29.5	270,290
Russell	34,504	1,028,219	29.8	678,625	5,292	138,650	26.2	124,785
Simcoe	129,091	4,789,276	37.1	2,562,263	45,705	1,480,842	32.4	1,073,610
Stormont	29,240	970,768	33.2	630,999	4,062	105,612	26.0	86,707
Sudbury	11,470	340,659	29.7	216,318	3,238	97,140	30.0	78,975
Thunder Bay	4,029	155,117	38.5	96,017	3,240	105,948	32.7	83,487
Timiskaming	12,119	342,968	28.3	215,041	3,797	93,786	24.7	78,124
Victoria	52,825	1,653,423	31.3	912,689	17,309	522,732	30.2	370,094
Waterloo	49,920	1,946,880	39.0	1,146,712	8,249	307,688	37.3	225,228
Welland	29,256	909,862	31.1	507,703	2,129	58,760	27.6	45,128
Wellington	94,740	3,524,328	37.2	1,931,332	28,044	978,736	34.9	713,499
Wentworth	43,213	1,702,592	39.4	907,482	5,685	196,133	34.5	142,393
York	78,405	3,128,360	39.9	1,689,314	25,482	935,189	36.7	670,531
The Province:								
1928	2,659,980	93,461,068	35.1	51,912,665	615,433	19,944,133	32.4	14,790,285
1927	2,689,295	101,913,746	37.9	58,438,236	514,802	17,238,125	33.5	13,382,864

PEAS AND BEANS

TABLE IX.—Showing by County Municipalities of Ontario the area, produce and market value of Peas and Beans for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Peas				Beans			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	1,026	24,624	24.0	37,921	55	550	10.0	1,650
Brant	537	10,740	20.0	14,606	514	9,252	18.0	36,360
Bruce	8,232	133,358	16.2	197,370	63	630	10.0	2,205
Carleton	1,335	20,025	15.0	32,040	338	4,563	13.5	16,701
Cochrane	29	386	13.3	579	.....	.....	.....	.....
Dufferin	2,198	39,124	17.8	53,991	14	210	15.0	630
Dundas	68	1,054	15.5	1,581	66	825	12.5	2,888
Durham	8,639	132,177	15.3	200,909	384	4,608	12.0	13,824
Elgin	1,065	19,383	18.2	29,075	10,384	200,411	19.3	769,578
Essex	1,592	25,472	16.0	34,387	898	12,572	14.0	40,859
Frontenac	257	4,009	15.6	6,334	113	1,356	12.0	4,339
Glengarry	215	3,225	15.0	5,160	173	1,730	10.0	5,986
Grenville	102	1,469	14.4	2,204	77	785	10.2	2,598
Grey	6,572	115,010	17.5	166,765	63	630	10.0	2,205
Haldimand	440	7,788	17.7	11,916	88	1,408	16.0	5,041
Haliburton	133	2,461	18.5	4,036	5	65	13.0	234
Halton	313	6,010	19.2	9,015	34	510	15.0	1,785
Hastings	1,144	19,791	17.3	30,478	332	3,984	12.0	14,422
Huron	6,474	97,110	15.0	152,463	11,360	148,816	13.1	577,406
Kenora	8	160	20.0	240	.....	.....	.....	.....
Kent	1,707	29,360	17.2	42,278	18,107	354,897	19.6	1,387,647
Lambton	2,602	46,055	17.7	71,846	1,148	22,960	20.0	90,003
Lanark	612	11,689	19.1	21,157	398	5,970	15.0	18,806
Leeds	62	1,178	19.0	1,767	110	1,562	14.2	5,592
Lennox & Add'gton	968	15,488	16.0	22,148	120	1,944	16.2	6,998
Lincoln	205	3,239	15.8	4,891	185	2,775	15.0	10,406
Manitoulin	1,674	38,000	22.7	56,620	16	128	8.0	384
Middlesex	2,712	46,375	17.1	62,143	2,120	36,888	17.4	142,757
Muskoka	265	4,717	17.8	8,019	14	168	12.0	504
Nipissing	414	6,334	15.3	10,008	7	56	8.0	168
Norfolk	1,632	29,376	18.0	36,720	829	15,419	18.6	53,350
Northumberland	3,946	63,925	16.2	88,856	404	6,060	15.0	20,725
Ontario	3,040	68,400	22.5	106,704	53	848	16.0	2,544
Oxford	1,236	22,001	17.8	31,901	276	4,416	16.0	15,633
Parry Sound	811	12,976	16.0	22,708	11	110	10.0	330
Peel	643	11,381	17.7	16,844	40	600	15.0	2,100
Perth	2,666	48,521	18.2	67,929	123	1,845	15.0	6,458
Peterborough	3,102	52,114	16.8	77,129	76	912	12.0	3,420
Prescott	166	2,523	15.2	4,037	153	1,989	13.0	6,226
Prince Edward	3,938	68,915	17.5	108,197	210	3,213	15.3	9,639
Rainy River	26	520	20.0	832	.....	.....	.....	.....
Renfrew	15,463	235,038	15.2	444,222	286	4,290	15.0	15,358
Russell	97	1,571	16.2	2,514	75	1,125	15.0	4,219
Simcoe	7,520	148,144	19.7	210,364	145	1,450	10.0	5,075
Stormont	84	1,260	15.0	1,890	70	770	11.0	2,564
Sudbury	1,396	27,920	20.0	47,185	29	290	10.0	870
Thunder Bay	344	7,224	21.0	13,003	3	30	10.0	90
Timiskaming	1,180	20,414	17.3	35,725	9	72	8.0	216
Victoria	3,672	67,198	18.3	100,125	60	600	10.0	2,100
Waterloo	892	17,126	19.2	23,291	48	720	15.0	2,520
Welland	93	1,432	15.4	1,790	648	5,249	8.1	17,059
Wellington	3,263	58,734	18.0	76,354	75	1,200	16.0	4,200
Wentworth	344	5,951	17.3	8,629	89	1,086	12.2	4,073
York	2,733	54,113	19.8	73,594	55	880	16.0	3,080
The Province:								
1928	109,887	1,892,588	17.2	2,892,490	50,953	873,427	17.1	3,343,825
1927	105,662	2,035,687	19.3	3,049,924	47,156	725,011	15.4	1,700,257

RYE AND BUCKWHEAT

TABLE X.—Showing by County Municipalities of Ontario the area, produce and market value of Rye and Buckwheat for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Rye				Buckwheat			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	146	2,336	16.0	2,219	206	4,635	22.5	4,172
Brant	4,816	89,096	18.5	85,532	5,398	105,801	19.6	85,064
Bruce	106	1,664	15.7	1,498	7,931	179,241	22.6	141,780
Carleton	350	5,600	16.0	5,600	7,342	132,156	18.0	118,015
Cochrane	13	208	16.0	187	.....	.....	....	.....
Dufferin	1,967	36,193	18.4	36,193	3,337	72,079	21.6	58,240
Dundas	5	90	18.0	90	4,421	91,515	20.7	86,939
Durham	5,942	83,782	14.1	83,782	9,740	222,072	22.8	175,215
Elgin	1,547	26,608	17.2	24,666	6,662	157,889	23.7	127,416
Essex	404	7,676	19.0	7,676	3,054	65,356	21.4	48,625
Frontenac	343	6,860	20.0	7,546	2,114	42,280	20.0	35,346
Glengarry	.....	.....	....	.....	3,165	55,071	17.4	52,868
Grenville	83	1,270	15.3	1,270	6,261	142,751	22.8	128,476
Grey	140	2,660	19.0	2,394	8,125	184,438	22.7	145,337
Haldimand	7	119	17.0	112	3,438	63,259	18.4	51,366
Haliburton	144	2,549	17.7	2,378	558	13,950	25.0	12,276
Halton	67	1,273	19.0	1,273	2,187	43,740	20.0	36,742
Hastings	2,434	42,108	17.3	41,266	9,258	180,531	19.5	150,743
Huron	137	2,411	17.6	2,170	11,736	267,581	22.8	215,403
Kenora	5	85	17.0	77	3	60	20.0	48
Kent	1,390	26,688	19.2	25,620	2,398	53,475	22.3	38,555
Lambton	151	2,567	17.0	2,464	1,224	26,316	21.5	19,737
Lanark	635	9,017	14.2	8,413	5,797	117,679	20.3	99,203
Leeds	127	1,918	15.1	1,918	4,764	97,662	20.5	80,571
Lennox & Add'gton	291	5,762	19.8	6,338	6,242	138,572	22.2	116,955
Lincoln	72	1,346	18.7	1,279	678	13,153	19.4	11,180
Manitoulin	90	1,440	16.0	1,440	379	8,490	22.4	7,318
Middlesex	588	10,584	18.0	9,526	5,401	118,822	22.0	95,533
Muskoka	42	798	19.0	798	503	10,965	21.8	8,958
Nipissing	221	4,199	19.0	4,199	254	4,445	17.5	3,778
Norfolk	9,296	141,299	15.2	130,278	11,144	216,194	19.4	174,901
Northumberland	6,733	112,441	16.7	105,919	16,910	378,784	22.4	303,785
Ontario	4,272	76,042	17.8	76,042	14,088	290,213	20.6	228,978
Oxford	1,875	28,500	15.2	25,650	7,920	172,656	21.8	138,988
Parry Sound	82	1,394	17.0	1,394	142	3,053	21.5	2,595
Peel	860	17,200	20.0	16,409	1,855	34,132	18.4	27,920
Perth	128	2,240	17.5	2,128	7,422	152,151	20.5	122,025
Peterborough	1,405	25,571	18.2	24,548	6,612	138,191	20.9	111,106
Prescott	46	736	16.0	736	2,210	34,697	15.7	31,227
Prince Edward	3,341	54,458	16.3	51,572	10,831	233,950	21.6	181,779
Rainy River	49	980	20.0	882	18	360	20.0	317
Renfrew	4,265	75,064	17.6	66,957	4,216	77,574	18.4	61,439
Russell	33	528	16.0	475	1,977	46,657	23.6	44,324
Simcoe	6,487	115,469	17.8	106,231	15,974	365,805	22.9	296,668
Stormont	3	48	16.0	43	3,633	72,660	20.0	65,394
Sudbury	238	3,808	16.0	3,808	570	9,975	17.5	9,476
Thunder Bay	64	1,280	20.0	1,254	51	1,020	20.0	867
Timiskaming	11	176	16.0	176	195	3,900	20.0	3,315
Victoria	508	8,636	17.0	8,291	9,581	207,908	21.7	161,752
Waterloo	1,135	24,403	21.5	22,866	3,055	48,575	15.9	38,617
Welland	142	2,272	16.0	2,272	3,042	48,672	16.0	40,690
Wellington	241	5,109	21.2	4,905	11,500	213,900	18.6	169,623
Wentworth	838	16,173	19.3	15,526	4,363	76,353	17.5	62,609
York	1,992	40,438	20.3	40,438	11,358	251,012	22.1	204,324
The Province:								
1928	66,307	1,131,172	17.1	1,076,724	271,243	5,692,376	21.0	4,638,578
1927	72,323	1,289,058	17.8	1,228,421	249,210	5,892,510	23.6	4,593,204

FLAX AND MIXED GRAINS

TABLE XI.—Showing by County Municipalities of Ontario the area, produce and market value of Flax and Mixed Grains for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Flax				Mixed Grains			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	36	216	6.0	324	2,269	85,314	37.6	67,057
Brant	69	483	7.0	966	13,297	538,529	40.5	358,122
Bruce	934	9,340	10.0	20,828	31,741	1,196,636	37.7	842,432
Carleton	28	168	6.0	252	12,486	344,614	27.6	258,461
Cochrane	8	48	6.0	72	172	5,160	30.0	3,870
Dufferin	19	114	6.0	228	21,479	786,131	36.6	518,846
Dundas	20	120	6.0	180	18,223	586,781	32.2	465,904
Durham	9	54	6.0	108	31,739	1,041,039	32.8	695,414
Elgin	10	60	6.0	120	17,793	692,148	38.9	479,659
Essex	13	78	6.0	156	19,260	805,068	41.8	520,879
Frontenac	14	84	6.0	168	4,936	172,760	35.0	120,932
Glengarry	.....	.....	....	.....	3,325	69,825	21.0	59,351
Grenville	4	24	6.0	36	5,293	172,023	32.5	136,586
Grey	439	4,171	9.5	9,385	42,325	1,549,095	36.6	1,099,857
Haldimand	11	88	8.0	176	11,806	381,334	32.3	266,171
Haliburton	15	90	6.0	135	523	16,736	32.0	13,054
Halton	19	114	6.0	228	10,954	456,782	41.7	322,945
Hastings	22	132	6.0	198	14,298	467,545	32.7	345,983
Huron	2,625	19,425	7.4	42,735	55,251	2,232,140	40.4	1,497,766
Kenora	.....	.....	....	.....	54	2,160	40.0	1,404
Kent	15	120	8.0	240	27,142	1,091,108	40.2	751,773
Lambton	187	1,309	7.0	2,618	30,832	1,035,955	33.6	685,802
Lanark	192	1,152	6.0	1,728	12,014	397,663	33.1	308,189
Leeds	18	108	6.0	162	8,278	304,630	36.8	236,088
Lennox & Add'gton	43	301	7.0	452	8,950	313,250	35.0	225,853
Lincoln	8	48	6.0	96	3,898	148,514	38.1	107,673
Manitoulin	10	90	9.0	135	2,282	81,467	35.7	65,174
Middlesex	185	1,850	10.0	3,700	28,184	1,034,353	36.7	661,986
Muskoka	4	24	6.0	36	598	19,555	32.7	16,133
Nipissing	10	80	8.0	120	840	23,016	27.4	18,022
Norfolk	19	114	6.0	228	5,916	203,510	34.4	135,131
Northumberland	46	322	7.0	644	22,457	756,801	33.7	476,785
Ontario	47	470	10.0	940	46,084	1,760,409	38.2	1,214,682
Oxford	225	1,575	7.0	3,150	43,753	1,798,248	41.1	1,276,756
Parry Sound	10	60	6.0	90	721	24,514	34.0	21,768
Peel	44	308	7.0	616	16,787	649,657	38.7	459,307
Perth	369	3,690	10.0	8,303	46,261	1,785,675	38.6	1,249,973
Peterborough	82	656	8.0	984	6,710	226,798	33.8	167,377
Prescott	40	240	6.0	360	1,838	52,567	28.6	43,788
Prince Edward	36	216	6.0	432	8,329	276,523	33.2	190,801
Rainy River	368	3,422	9.3	5,989	235	8,766	37.3	5,917
Renfrew	161	1,449	9.0	2,681	5,913	177,390	30.0	124,705
Russell	52	312	6.0	468	6,690	200,700	30.0	160,560
Simcoe	184	1,104	6.0	2,208	38,546	1,418,493	36.8	1,001,456
Stormont	3	18	6.0	27	8,506	255,180	30.0	191,385
Sudbury	51	306	6.0	459	801	24,030	30.0	20,185
Thunder Bay	6	36	6.0	54	1,233	49,320	40.0	32,058
Timiskaming	50	300	6.0	450	1,013	30,390	30.0	24,312
Victoria	104	728	7.0	1,092	21,576	709,850	32.9	489,797
Waterloo	272	2,720	10.0	5,848	39,081	1,660,943	42.5	1,142,729
Welland	12	84	7.0	168	2,357	70,710	30.0	50,840
Wellington	657	7,884	12.0	17,266	67,744	2,669,114	39.4	1,871,049
Wentworth	18	126	7.0	252	22,878	839,623	36.7	554,151
York	141	1,410	10.0	2,820	50,022	1,990,876	39.8	1,363,750
The Province:								
1928	7,964	67,441	8.5	141,111	905,693	33,691,418	37.2	23,420,648
1927	7,080	68,173	9.6	121,004	799,333	31,918,944	39.9	22,882,169

CORN

TABLE XII.—Showing by County Municipalities of Ontario the area, produce, and market value of Corn for husking and for fodder for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Corn for Husking				Corn for Silo			
	Acres	Bushels (in the ear)	Per acre	Market value	Acres	Tons (green)	Per acre	Market value
				$				$
Algoma	44	1,100	25.0	550	186	1,674	9.00	6,981
Brant	1,765	124,962	70.8	85,474	7,630	66,991	8.78	279,352
Bruce	312	12,480	40.0	7,488	4,255	35,019	8.23	146,029
Carleton	842	21,050	25.0	14,735	14,691	146,910	10.00	612,615
Cochrane	.....	.....	....	.....	.....	.....	....	.....
Dufferin	63	2,520	40.0	1,512	541	3,922	7.25	16,355
Dundas	1,390	55,600	40.0	38,920	12,091	103,620	8.57	432,095
Durham	1,019	50,950	50.0	38,213	5,494	43,512	7.92	181,445
Elgin	9,468	585,122	61.8	407,830	14,890	126,565	8.50	527,776
Essex	29,473	2,201,633	74.7	1,494,909	5,270	42,845	8.13	178,664
Frontenac	677	30,465	45.0	23,854	2,556	18,531	7.25	77,274
Glengarry	682	13,640	20.0	10,462	5,737	44,634	7.78	186,124
Grenville	1,221	54,090	44.3	41,487	6,134	56,065	9.14	233,791
Grey	311	12,440	40.0	7,464	4,843	48,430	10.00	201,953
Haldimand	1,089	65,340	60.0	47,437	3,743	29,195	7.80	121,743
Haliburton	100	3,000	30.0	1,800	325	2,275	7.00	9,487
Halton	330	14,850	45.0	10,870	3,874	38,740	10.00	161,546
Hastings	1,317	52,680	40.0	38,035	4,489	33,668	7.50	140,396
Huron	704	35,200	50.0	21,120	4,880	41,919	8.59	174,802
Kenora	2	40	20.0	20	1	7	7.00	29
Kent	17,527	1,216,374	69.4	797,941	9,009	68,108	7.56	284,010
Lambton	7,440	520,800	70.0	324,458	10,110	71,882	7.11	299,748
Lanark	933	37,320	40.0	26,124	6,892	75,812	11.00	316,136
Leeds	2,079	103,950	50.0	80,873	8,499	74,536	8.77	310,815
Lennox & Add'gton	1,382	85,684	62.0	60,236	3,677	33,718	9.17	140,604
Lincoln	2,340	106,236	45.4	77,871	4,983	34,881	7.00	145,454
Manitoulin	47	940	20.0	470	362	3,385	9.35	14,115
Middlesex	4,356	267,023	61.3	181,576	21,437	196,792	9.18	820,623
Muskoka	76	1,520	20.0	912	194	1,533	7.90	6,393
Nipissing	125	2,500	20.0	1,250	87	548	6.30	2,285
Norfolk	8,650	593,390	68.6	430,801	7,393	56,483	7.64	235,534
Northumberland	1,544	69,480	45.0	52,110	6,733	60,058	8.92	250,442
Ontario	480	24,000	50.0	15,600	8,275	76,709	9.27	319,877
Oxford	1,700	85,000	50.0	59,160	22,305	226,619	10.16	945,001
Parry Sound	20	400	20.0	240	61	549	9.00	2,289
Peel	699	27,960	40.0	19,572	4,235	32,482	7.67	135,450
Perth	167	6,680	40.0	4,676	8,584	87,643	10.21	365,471
Peterborough	116	3,480	30.0	2,290	4,974	42,776	8.60	178,376
Prescott	1,012	32,384	32.0	23,316	7,154	51,509	7.20	214,793
Prince Edward	1,915	117,581	61.4	77,016	3,521	27,922	7.93	116,435
Rainy River	.....	.....	....	.....	55	440	8.00	1,835
Renfrew	322	9,982	31.0	5,989	2,600	25,350	9.75	105,710
Russell	273	8,190	30.0	5,733	5,828	64,108	11.00	267,330
Simcoe	1,015	40,600	40.0	26,796	5,348	49,202	9.20	205,172
Stormont	661	18,508	28.0	12,641	6,399	44,793	7.00	186,787
Sudbury	22	440	20.0	220	51	408	8.00	1,701
Thunder Bay	14	280	20.0	140	4	28	7.00	117
Timiskaming	4	80	20.0	40	2	12	6.00	50
Victoria	107	3,210	30.0	2,247	4,813	49,526	10.29	206,523
Waterloo	185	9,805	53.0	6,471	7,948	92,276	11.61	384,791
Welland	2,396	95,840	40.0	63,542	4,800	27,888	5.81	116,293
Wellington	291	11,640	40.0	8,148	5,215	54,080	10.37	225,514
Wentworth	1,021	57,891	56.7	36,008	7,502	77,271	10.30	322,220
York	464	25,520	55.0	17,864	8,627	91,878	10.65	383,131
The Province:								
1928	110,192	6,921,850	62.8	4,714,511	299,307	2,685,727	8.97	11,199,482
1927	102,626	5,449,213	53.1	3,613,287	326,964	2,490,660	7.62	10,012,453

POTATOES AND TURNIPS

TABLE XIII.—Showing by County Municipalities of Ontario the area, produce and market value of Potatoes and Turnips for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Potatoes				Turnips			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	1,204	173,376	144.0	114,602	316	87,532	277	17,506
Brant	3,120	375,336	120.3	213,942	2,383	1,139,074	478	227,815
Bruce	4,019	346,438	86.2	224,145	2,571	1,198,086	466	239,617
Carleton	5,508	424,667	77.1	286,226	746	231,260	310	46,252
Cochrane	269	25,098	93.3	22,588	54	12,150	225	2,430
Dufferin	8,709	920,541	105.7	281,686	2,214	1,180,062	533	236,012
Dundas	1,294	102,355	79.1	67,554	63	18,900	300	3,780
Durham	4,886	593,160	121.4	284,124	1,839	825,711	449	165,142
Elgin	3,542	448,771	126.7	232,015	173	57,609	333	11,522
Essex	4,728	777,283	164.4	404,964	92	27,600	300	5,520
Frontenac	2,740	210,706	76.9	134,641	112	28,000	250	5,600
Glengarry	2,168	155,662	71.8	106,317	170	59,500	350	11,900
Grenville	2,725	231,625	85.0	157,042	185	55,500	300	11,100
Grey	6,055	484,400	80.0	305,656	3,383	1,380,264	408	276,053
Haldimand	1,070	105,181	98.3	65,107	58	14,500	250	2,900
Haliburton	545	71,559	131.3	54,385	90	29,250	325	5,850
Halton	1,950	206,115	105.7	104,706	1,493	880,870	590	176,174
Hastings	5,086	561,494	110.4	380,131	701	259,370	370	51,874
Huron	3,812	349,179	91.6	209,507	3,070	1,449,040	472	289,808
Kenora	164	19,483	118.8	13,852	17	3,740	220	748
Kent	5,366	889,683	165.8	437,724	49	17,248	352	3,450
Lambton	3,579	309,941	86.6	165,199	227	54,934	242	10,987
Lanark	2,738	313,227	114.4	227,090	485	151,805	313	30,361
Leeds	2,754	282,836	102.7	182,712	413	142,072	344	28,414
Lennox & Add'gton	2,915	274,593	94.2	182,604	98	27,342	279	5,468
Lincoln	1,411	149,566	106.0	103,500	108	29,268	271	5,854
Manitoulin	487	70,810	145.4	39,229	161	36,225	225	7,245
Middlesex	7,358	770,383	104.7	396,747	1,195	553,285	463	110,657
Muskoka	1,068	119,509	111.9	78,159	411	138,507	337	27,701
Nipissing	1,589	146,983	92.5	100,977	310	84,630	273	16,926
Norfolk	4,308	614,752	142.7	319,671	493	197,200	400	39,440
Northumberland	4,323	450,457	104.2	267,571	2,061	999,585	485	199,917
Ontario	6,521	714,702	109.6	328,048	6,828	3,919,272	574	783,854
Oxford	2,511	270,937	107.9	161,208	4,609	2,157,012	468	431,402
Parry Sound	1,328	157,235	118.4	102,989	405	135,675	335	27,135
Peel	4,551	377,278	82.9	170,530	953	285,900	300	57,180
Perth	2,668	291,879	109.4	191,181	3,035	1,663,180	548	332,636
Peterborough	2,481	267,948	108.0	177,114	1,506	652,098	433	130,420
Prescott	2,148	227,688	106.0	153,234	151	30,200	200	6,040
Prince Edward	1,551	204,887	132.1	136,250	95	21,280	224	4,256
Rainy River	843	132,267	156.9	90,074	119	39,151	329	7,830
Renfrew	4,497	325,133	72.3	231,170	324	117,936	364	23,587
Russell	1,658	184,701	111.4	123,196	424	144,160	340	28,832
Simcoe	13,914	1,655,766	119.0	702,045	4,681	2,190,708	468	438,142
Stormont	1,624	89,320	55.0	61,363	73	18,250	250	3,650
Sudbury	1,936	311,696	161.0	212,265	282	61,758	219	12,352
Thunder Bay	2,074	301,974	145.6	234,030	316	118,816	376	23,763
Timiskaming	1,041	66,208	63.6	56,608	205	52,890	258	10,578
Victoria	1,952	228,579	117.1	124,347	2,747	1,043,860	380	208,772
Waterloo	3,287	413,176	125.7	249,971	4,047	2,306,790	570	461,358
Welland	2,007	164,173	81.8	115,578	51	17,493	343	3,499
Wellington	5,920	668,368	112.9	340,199	8,132	4,667,768	574	933,554
Wentworth	6,339	690,317	108.9	434,900	1,714	846,716	494	169,343
York	8,900	1,072,450	120.5	492,255	5,353	2,462,380	460	492,476
The Province:								
1928	181,241	19,791,851	109.2	11,052,928	71,791	34,323,412	478	6,864,682
1927	159,871	15,495,307	96.9	13,662,224	68,479	29,452,281	430	5,448,672

MANGELS AND SUGAR BEETS

TABLE XIV.—Showing by County Municipalities of Ontario the area, produce and market value of Mangels and Sugar Beets for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Mangels				Sugar Beets			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
Algoma	21	5,880	280	1,176	27	2,700	100	489
Brant	892	404,076	453	80,815	21	7,350	350	1,332
Bruce	1,510	650,810	431	130,162	88	15,400	175	2,791
Carleton	290	65,250	225	13,050	115	17,250	150	3,126
Cochrane	3	720	240	144	1	100	100	18
Dufferin	280	119,000	425	23,800	120	36,000	300	6,525
Dundas	42	10,500	250	2,100	64	9,600	150	1,740
Durham	1,045	407,550	390	81,510	26	7,800	300	1,414
Elgin	338	164,944	488	32,989	343	120,050	350	21,759
Essex	516	206,400	400	41,280	8,065	3,008,245	373	545,244
Frontenac	41	12,300	300	2,460	68	13,600	200	2,465
Glengarry	111	33,300	300	6,660	23	3,450	150	625
Grenville	39	12,831	329	2,566	28	4,676	167	848
Grey	1,660	682,260	411	136,452	122	30,500	250	5,528
Haldimand	205	87,125	425	17,425	52	13,000	250	2,356
Haliburton	27	8,100	300	1,620	8	1,200	150	217
Halton	800	416,000	520	83,200	22	6,600	300	1,196
Hastings	180	69,480	386	13,896	148	29,600	200	5,365
Huron	2,377	957,931	403	191,586	22	4,400	200	798
Kenora	.....	.....	....	.....	2	300	150	54
Kent	407	207,163	509	41,433	27,727	9,399,453	339	1,703,650
Lambton	690	255,300	370	51,060	5,913	1,821,204	308	330,093
Lanark	139	41,700	300	8,340	31	7,378	238	1,337
Leeds	89	34,888	392	6,978	109	29,975	275	5,433
Lennox & Add'gton	72	20,232	281	4,046	39	7,722	198	1,400
Lincoln	196	71,540	365	14,308	117	35,100	300	6,362
Manitoulin	61	12,200	200	2,440	10	2,000	200	363
Middlesex	1,290	576,630	447	115,326	674	218,376	324	39,581
Muskoka	38	13,680	360	2,736	15	3,750	250	680
Nipissing	45	10,530	234	2,106	17	1,700	100	308
Norfolk	238	116,620	490	23,324	88	35,200	400	6,380
Northumberland	798	347,130	435	69,426	68	20,400	300	3,698
Ontario	2,076	1,108,584	534	221,717	.....	.....	....	.....
Oxford	2,065	1,009,785	489	201,957	100	30,000	300	5,438
Parry Sound	42	12,600	300	2,520	34	6,800	200	1,233
Peel	461	138,300	300	27,660	61	15,250	250	2,764
Perth	2,684	1,382,260	515	276,452	20	6,000	300	1,088
Peterborough	393	155,235	395	31,047	12	1,800	150	326
Prescott	26	5,200	200	1,040	28	4,200	150	761
Prince Edward	64	16,576	259	3,315	23	4,025	175	730
Rainy River	22	8,250	375	1,650	13	2,925	225	530
Renfrew	170	61,710	363	12,342	101	25,250	250	4,576
Russell	131	34,453	263	6,891	36	3,600	100	653
Simcoe	1,938	813,960	420	162,792	291	97,776	336	17,722
Stormont	41	10,660	260	2,132	28	6,160	220	1,117
Sudbury	40	8,000	200	1,600	10	1,000	100	181
Thunder Bay	23	8,809	383	1,762	6	900	150	163
Timiskaming	19	4,750	250	950	10	1,000	100	181
Victoria	701	225,722	322	45,144	35	5,250	150	952
Waterloo	2,205	1,062,810	482	212,562	26	7,800	300	1,414
Welland	113	39,550	350	7,910	49	15,925	325	2,886
Wellington	2,119	998,049	471	199,610	56	16,800	300	3,045
Wentworth	934	415,630	445	83,126	103	25,750	250	4,667
York	2,860	1,195,480	418	239,096	79	23,700	300	4,296
The Province:								
1928	33,567	14,738,443	439	2,947,689	45,294	15,215,990	336	2,757,898
1927	34,665	13,494,700	389	2,496,520	38,503	13,453,691	349	2,606,653

ALSIKE AND SWEET CLOVER

Table XV.—Showing by County Municipalities of Ontario the area, produce and market value of Alsike and Sweet Clover for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Alsike				Sweet Clover			
	Acres	Tons	Per acre	Market value	Acres	Tons	Per acre	Market value
				$				$
Algoma	726	1,104	1.52	13,853	428	749	1.75	7,579
Brant	451	731	1.62	7,538	7,076	18,044	2.55	131,828
Bruce	2,759	4,001	1.45	37,530	19,839	36,504	1.84	258,569
Carleton	1,986	2,780	1.40	36,570	6,141	13,817	2.25	125,833
Cochrane	665	931	1.40	12,247	230	460	2.00	4,655
Dufferin	3,337	4,739	1.42	47,954	9,590	19,180	2.00	126,154
Dundas	334	468	1.40	5,683	2,401	5,066	2.11	37,576
Durham	5,140	7,093	1.38	76,296	15,708	30,474	1.94	240,526
Elgin	1,142	1,941	1.70	18,659	13,687	36,818	2.69	266,009
Essex	1,185	1,896	1.60	22,543	10,083	26,821	2.66	262,445
Frontenac	1,417	2,267	1.60	21,403	1,692	3,384	2.00	23,970
Glengarry	167	271	1.62	3,291	1,064	2,394	2.25	21,802
Grenville	487	867	1.78	10,387	4,204	10,930	2.60	95,891
Grey	3,920	5,331	1.36	53,944	21,626	42,819	1.98	290,301
Haldimand	17,162	21,967	1.28	202,056	4,423	9,598	2.17	69,637
Haliburton	77	96	1.25	1,069	203	406	2.00	3,287
Halton	2,307	3,184	1.38	35,441	2,762	5,248	1.90	42,484
Hastings	4,513	6,724	1.49	72,327	11,003	21,676	1.97	175,472
Huron	2,246	3,167	1.41	28,490	29,148	61,502	2.11	437,504
Kenora	1,173	1,466	1.25	18,795	44	77	1.75	779
Kent	3,426	5,961	1.74	54,287	8,099	21,381	2.64	151,448
Lambton	2,388	3,391	1.42	32,598	21,532	55,983	2.60	396,544
Lanark	2,421	4,309	1.78	47,963	5,423	13,558	2.50	109,755
Leeds	804	1,447	1.80	16,473	3,028	7,570	2.50	65,877
Lennox & Add'gton	1,062	1,859	1.75	18,925	4,844	7,944	1.64	62,620
Lincoln	1,386	1,774	1.28	21,326	1,762	3,594	2.04	32,731
Manitoulin	766	935	1.22	10,407	1,152	2,304	2.00	16,320
Middlesex	3,270	5,363	1.64	60,563	25,452	62,103	2.44	483,255
Muskoka	762	1,044	1.37	12,941	23	46	2.00	465
Nipissing	125	206	1.65	2,501	132	264	2.00	2,671
Norfolk	3,324	5,119	1.54	52,835	7,549	18,042	2.39	130,900
Northumberland	3,858	7,292	1.89	71,943	18,727	40,825	2.18	326,769
Ontario	6,509	11,846	1.82	125,863	12,375	25,988	2.10	218,005
Oxford	848	1,459	1.72	14,867	10,653	24,395	2.29	172,797
Parry Sound	367	595	1.62	7,527	79	158	2.00	1,599
Peel	8,135	11,064	1.36	111,957	5,922	13,265	2.24	109,665
Perth	1,200	1,968	1.64	17,544	18,056	42,432	2.35	304,852
Peterborough	3,656	5,009	1.37	64,422	9,400	19,740	2.10	179,774
Prescott	1,712	2,636	1.54	28,568	730	1,825	2.50	18,467
Prince Edward	1,813	3,136	1.73	30,147	7,427	16,042	2.16	118,013
Rainy River	892	1,222	1.37	13,602	221	387	1.75	3,916
Renfrew	2,243	3,746	1.67	40,331	2,980	6,377	2.14	54,850
Russell	644	966	1.50	9,775	1,290	2,580	2.00	20,886
Simcoe	22,270	35,855	1.61	386,037	26,993	62,084	2.30	460,491
Stormont	789	1,215	1.54	14,754	1,293	2,483	1.92	20,100
Sudbury	289	462	1.60	5,797	339	678	2.00	6,861
Thunder Bay	227	420	1.85	5,363	340	700	2.06	7,083
Timiskaming	3,883	6,756	1.74	83,746	245	490	2.00	4,958
Victoria	12,131	16,498	1.36	173,454	9,333	19,599	2.10	178,490
Waterloo	553	957	1.73	10,652	11,902	28,089	2.36	235,345
Welland	1,653	2,132	1.29	21,099	1,892	4,503	2.38	36,453
Wellington	1,408	2,112	1.50	17,460	17,761	38,186	2.15	251,163
Wentworth	859	1,417	1.65	16,633	3,290	7,008	2.13	63,823
York	9,000	14,130	1.57	128,683	11,872	28,018	2.36	198,460
The Province:								
1928	155,867	235,325	1.51	2,457,119	413,468	924,608	2.24	7,067,707
1927	176,870	290,345	1.64	2,991,247	400,296	927,342	2.32	7,075,797

ALFALFA AND HAY AND CLOVER

TABLE XVI.—Showing by County Municipalities of Ontario the area, produce and market value of Alfalfa, Hay and Clover for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Alfalfa				Hay and Clover			
	Acres	Tons	Per acre	Market value	Acres	Tons	Per acre	Market value
				$				$
Algoma	482	930	1.93	12,681	26,360	35,586	1.35	540,142
Brant	12,553	31,131	2.48	347,182	24,733	45,509	1.84	475,242
Bruce	46,780	98,238	2.10	991,285	98,910	166,169	1.68	1,617,569
Carelton	8,075	19,703	2.44	273,468	102,329	161,680	1.58	1,881,446
Cochrane	53	106	2.00	1,445	7,616	12,490	1.64	176,941
Dufferin	7,532	15,441	2.05	169,195	57,707	84,829	1.47	831,775
Dundas	3,195	6,007	1.88	80,449	56,503	81,929	1.45	1,044,589
Durham	8,627	21,999	2.55	258,839	40,185	60,679	1.51	743,567
Elgin	23,744	57,460	2.42	686,703	52,388	80,678	1.54	816,381
Essex	26,047	68,764	2.64	841,890	26,714	44,880	1.68	585,842
Frontenac	5,143	11,572	2.25	115,529	77,534	125,605	1.62	1,249,390
Glengarry	3,203	6,854	2.14	90,123	61,827	85,321	1.38	1,066,253
Grenville	3,771	9,616	2.55	119,136	51,352	81,136	1.58	955,662
Grey	62,156	133,014	2.14	1,383,655	123,768	195,553	1.58	1,909,542
Haldimand	25,747	61,278	2.38	746,060	44,704	67,950	1.52	641,518
Haliburton	140	280	2.00	3,273	14,297	18,586	1.30	211,581
Halton	13,620	30,781	2.26	412,235	26,512	41,889	1.58	519,246
Hastings	21,436	51,446	2.40	641,888	90,735	141,547	1.56	1,594,165
Huron	38,927	84,861	2.18	878,618	90,753	146,112	1.61	1,403,104
Kenora	42	95	2.25	1,295	3,611	4,947	1.37	65,076
Kent	36,010	91,826	2.55	924,794	30,169	51,891	1.72	483,603
Lambton	44,363	104,253	2.35	1,098,689	52,136	87,067	1.67	881,031
Lanark	9,488	23,056	2.43	262,068	76,911	148,438	1.93	1,634,224
Leeds	6,663	17,191	2.58	200,928	76,576	121,756	1.59	1,355,254
Lennox & Add'gton	11,840	27,824	2.35	329,814	63,457	100,262	1.58	971,940
Lincoln	11,670	28,825	2.47	408,780	33,005	48,847	1.48	590,173
Manitoulin	2,093	4,584	2.19	50,587	17,779	23,113	1.30	236,219
Middlesex	40,255	95,807	2.38	1,144,988	75,606	130,042	1.72	1,425,114
Muskoka	130	293	2.25	3,995	29,442	45,635	1.55	637,257
Nipissing	33	74	2.25	865	26,742	39,311	1.47	519,114
Norfolk	12,545	31,864	2.54	367,771	43,734	70,849	1.62	764,955
Northumberland	12,834	29,262	2.28	349,710	49,524	80,724	1.63	892,813
Ontario	15,572	37,840	2.43	497,558	58,293	89.188	1.53	1,136,239
Oxford	24,291	53,197	2.19	633,683	60,718	108,685	1.79	1,152,573
Parry Sound	229	515	2.25	7,524	33,557	54,027	1.61	710,709
Peel	30,748	70,105	2.28	851,480	36,579	56,697	1.55	720,014
Perth	13,859	33,816	2.44	375,150	84,507	146,197	1.73	1,479,367
Peterborough	8,786	21,086	2.40	272,947	42,936	64,404	1.50	853,732
Prescott	1,288	3,065	2.38	36,570	71,240	99,024	1.39	1,162,347
Prince Edward	6,911	15,757	2.28	169,588	39,937	63,899	1.60	653,707
Rainy River	1,087	2,120	1.95	26,327	23,485	28,887	1.23	314,815
Renfrew	6,784	16,553	2.44	184,120	98,484	172,347	1.75	1,785,835
Russell	2,597	6,025	2.32	70,420	53,212	77,157	1.45	936,902
Simcoe	30,286	70,869	2.34	797,946	93,551	147,811	1.58	1,678,174
Stormont	1,477	2,718	1.84	37,063	50,187	65,745	1.31	864,856
Sudbury	456	912	2.00	12,436	29,334	40,481	1.38	607,477
Thunder Bay	927	1,937	2.09	28,300	21,171	33,662	1.59	496,973
Timiskaming	404	909	2.25	12,395	25,144	43,248	1.72	590,796
Victoria	7,460	17,083	2.29	232,944	51,497	70,036	1.36	997,133
Waterloo	11,754	30,090	2.56	365,173	41,588	83,176	2.00	958,649
Welland	6,224	13,693	2.20	171,914	50,207	66,273	1.32	705,489
Wellington	18,449	40,772	2.21	414,989	101,300	166,132	1.64	1,555,008
Wentworth	13,447	27,835	2.07	366,003	37,867	56,422	1.49	703,962
York	40,997	98,803	2.41	1,257,780	52,663	91,107	1.73	1,240,893
The Province:								
1928	743,230	1,730,135	2.33	20,020,248	2,811,076	4,455,615	1.59	50,026,378
1927	806,397	1,865,868	2.31	21,915,225	2,832,813	4,914,515	1.73	54,161,232

CARROTS—ALL FIELD CROPS

TABLE XVII.—Showing by County Municipalities of Ontario the area, produce and market value of Carrots and all Field Crops enumerated in Tables VII to XVII for the year 1928, together with the comparative totals for the Province for 1927.

Counties and Districts	Carrots				All Field Crops		
	Acres	Bushels	Per acre	Market value	Acres	Value	Per acre
				$		$	$ c.
Algoma	43	5,375	125	1,075	47,254	1,164,632	24.65
Brant	16	4,000	250	800	137,539	3,653,519	26.56
Bruce	36	5,400	150	1,080	385,304	8,416,413	21.84
Carleton	104	10,400	100	2,080	264,494	5,580,985	21.10
Cochrane	19	1,900	100	380	12,407	287,719	23.19
Dufferin	12	1,800	150	360	200,176	3,959,018	19.78
Dundas	5	500	100	100	129,205	2,902,467	22.46
Durham	15	2,250	150	450	210,841	4,694,212	22.26
Elgin	31	6,200	200	1,240	249,460	6,489,281	26.01
Essex	102	22,950	225	4,590	286,630	8,535,113	29.78
Frontenac	56	8,400	150	1,680	139,254	2,585,046	18.56
Glengarry	58	8,700	150	1,740	133,936	2,436,765	18.19
Grenville	28	4,200	150	840	115,847	2,631,383	22.71
Grey	38	5,700	150	1,140	480,408	10,209,191	21.25
Haldimand	16	3,200	200	640	184,924	3,578,737	19.35
Haliburton	26	2,600	100	520	25,911	487,854	18.83
Halton	13	1,950	150	390	114,866	3,048,305	26.54
Hastings	75	11,250	150	2,250	274,375	5,856,339	21.34
Huron	16	2,400	150	480	450,334	10,492,893	23.30
Kenora	3	300	100	60	7,324	165,927	22.66
Kent	41	10,250	250	2,050	366,618	11,460,509	31.26
Lambton	44	7,700	175	1,540	340,435	7,699,538	22.62
Lanark	56	8,400	150	1,680	179,463	4,340,018	24.18
Leeds	29	5,800	200	1,160	167,215	3,743,472	22.39
Lennox and Addington	26	4,108	158	822	160,213	3,267,839	20.40
Lincoln	36	9,000	250	1,800	105,289	2,427,832	23.06
Manitoulin	13	1,300	100	260	35,497	701,540	19.76
Middlesex	45	7,875	175	1,575	403,764	9,829,058	24.34
Muskoka	26	3,900	150	780	46,329	1,080,455	23.32
Nipissing	38	3,800	100	760	47,279	979,253	20.71
Norfolk	34	6,800	200	1,360	185,947	4,309,837	23.18
Northumberland	29	4,350	150	870	244,854	5,498,075	22.45
Ontario	48	9,600	200	1,920	287,877	7,670,165	26.64
Oxford	26	3,900	150	780	293,188	7,887,924	26.90
Parry Sound	38	5,700	150	1,140	57,640	1,335,147	23.16
Peel	187	28,050	150	5,610	187,689	4,451,250	23.72
Perth	12	1,800	150	360	335,231	8,217,912	24.51
Peterborough	32	3,200	100	640	169,656	4,017,622	23.68
Prescott	45	4,500	100	900	148,895	2,870,956	19.28
Prince Edward	15	2,250	150	450	130,427	2,667,306	20.45
Rainy River	3	450	150	90	37,432	714,806	19.10
Renfrew	62	9,300	150	1,860	255,434	5,185,650	20.30
Russell	37	3,700	100	740	117,424	2,540,265	21.63
Simcoe	65	13,000	200	2,600	514,983	12,332,525	23.95
Stormont	28	3,640	130	728	109,186	2,208,129	20.22
Sudbury	48	4,800	100	960	51,763	1,268,973	24.52
Thunder Bay	32	4,800	150	960	34,831	1,044,554	29.99
Timiskaming	30	3,000	100	600	51,127	1,171,042	22.86
Victoria	8	1,200	150	240	211,242	4,637,732	21.95
Waterloo	4	600	150	120	209,696	6,253,411	29.82
Welland	16	3,200	200	640	126,843	2,318,586	18.28
Wellington	45	11,250	250	2,250	380,835	9,190,356	24.13
Wentworth	22	3,300	150	660	162,628	4,213,080	25.91
York	70	14,000	200	2,800	350,451	9,734,520	27.78
The Province:							
1928	2,002	317,998	159	63,600	10,357,960	244,445,136	23.60
1927	1,743	286,863	165	53,070	10,305,045	256,627,042	24.90

PASTURE, FALLOW, ORCHARD, SMALL FRUITS

TABLE XVIII.—Showing by County Municipalities the area in Cleared Pasture, Summer Fallow, Orchards and Small Fruits in 1928, together with totals for the Province for the past five years; also, the number of silos in each county in 1928.

Counties and Districts	Cleared pasture	Summer fallow	Orchard	Small fruits	Total	Number of silos
	Acres	Acres	Acres	Acres	Acres	
Algoma	10,068	927	311	123	11,429	35
Brant	23,420	2,297	3,780	550	30,047	997
Bruce	134,618	13,777	6,794	384	155,573	879
Carleton	88,014	1,882	1,687	419	92,002	1,513
Cochrane	2,062	17	2	4	2,085	.....
Dufferin	55,843	4,344	2,187	140	62,514	131
Dundas	41,008	264	1,570	250	43,092	1,099
Durham	58,837	5,781	6,824	291	71,733	752
Elgin	73,407	3,807	6,819	917	84,950	1,427
Essex	35,692	1,819	5,231	1,188	43,930	406
Frontenac	78,174	245	1,040	244	79,703	415
Glengarry	47,497	242	902	94	48,735	665
Grenville	47,469	189	1,315	311	49,284	552
Grey	143,258	12,563	9,007	465	165,293	1,163
Haldimand	33,892	9,703	4,298	227	48,120	560
Haliburton	13,958	323	127	40	14,448	5
Halton	28,467	3,603	5,217	809	38,096	626
Hastings	104,965	2,506	4,620	533	112,624	598
Huron	149,096	8,593	10,877	456	169,022	1,375
Kenora	766	213	1	11	991	6
Kent	72,681	2,623	4,890	776	80,970	760
Lambton	139,652	5,324	10,206	845	156,027	1,490
Lanark	113,329	1,317	1,249	177	116,072	1,187
Leeds	80,741	254	1,216	346	82,557	1,148
Lennox and Addington	70,360	1,767	1,798	413	74,338	315
Lincoln	19,476	4,747	12,884	6,788	43,895	640
Manitoulin	9,404	112	191	22	9,729	102
Middlesex	190,789	7,496	11,157	1,086	210,528	2,366
Muskoka	17,088	192	122	73	17,475	36
Nipissing	12,210	172	36	89	12,507	19
Norfolk	41,098	6,465	8,326	1,496	57,385	1,082
Northumberland	68,381	3,015	10,072	591	82,059	829
Ontario	62,842	4,433	5,048	423	72,746	1,473
Oxford	71,287	2,568	7,297	472	81,624	2,619
Parry Sound	20,094	699	118	109	21,020	24
Peel	45,000	4,670	5,152	1,380	56,202	825
Perth	84,358	8,930	5,458	285	99,031	1,260
Peterborough	60,544	4,824	1,555	218	67,141	568
Prescott	55,659	6	868	155	56,688	645
Prince Edward	42,646	894	7,110	297	50,947	265
Rainy River	5,780	260	6	21	6,067	11
Renfrew	90,244	1,405	710	241	92,600	632
Russell	38,198	90	482	110	38,880	660
Simcoe	91,778	32,532	7,669	813	132,792	1,250
Stormont	41,922	38	1,088	204	43,252	755
Sudbury	9,869	195	22	43	10,129	13
Thunder Bay	4,206	257	34	53	4,550	31
Timiskaming	7,595	270	61	25	7,951	10
Victoria	56,409	3,154	1,621	174	61,358	728
Waterloo	26,615	4,626	4,140	321	35,702	1,430
Welland	25,240	7,888	5,435	1,560	40,123	645
Wellington	80,433	7,561	5,097	337	93,428	1,040
Wentworth	24,182	5,404	5,860	1,385	36,831	1,198
York	49,551	13,732	7,416	577	71,276	1,855
The Province:						
1928	3,000,172	211,015	207,003	*29,361	3,447,551	41,115
1927	3,012,786	212,906	211,225	*29,178	3,466,095	39,996
1926	3,077,424	189,488	215,779	*28,491	3,511,182	38,171
1925	3,193,941	162,649	223,343	*27,890	3,607,823	37,836
1924	3,317,532	179,527	229,708	27,315	3,754,082	37,218

*Including 7,773 acres in strawberries, and 8,855 in vineyards in 1928, and 7,836 acres in strawberries and 7,905 in vineyards in 1927, and 7,274 in strawberries and 7,545 in vineyards in 1926, and 7,185 in strawberries and 6,558 in vineyards in 1925.

MARKET PRICES

TABLE XIX.—The following table shows by Counties the average prices of agricultural products for 1928, together with the average prices for 1927.

Counties and Districts	Fall Wheat, per bush.	Spring Wheat per bush.	Oats, per bush.	Barley, per bush.	Peas, per bush.	Beans, per bush.	Rye, per bush.	Buckwheat, per bush.	Corn (in ear) per bush.	Hay, per ton	Potatoes, per bush.
	cts.	cts.	cts.	cts.	cts.	$ c.	cts.	cts.	cts.	$ c.	cts.
Algoma	125.0	120.0	64.6	84.0	154.0	3.00	95.0	90.0	50.0	15.18	66.1
Brant	122.4	120.0	52.8	72.8	136.0	3.93	96.0	80.4	68.4	10.44	57.0
Bruce	122.0	118.3	54.6	74.5	148.0	3.50	90.0	79.1	60.0	9.73	64.7
Carleton	120.0	119.0	61.0	80.0	160.0	3.66	100.0	89.3	70.0	11.64	67.4
Cochrane	125.0	115.0	66.0	80.0	150.0	.....	90.0	....	.....	14.17	90.0
Dufferin	124.1	119.0	52.0	70.1	138.0	3.00	100.0	80.8	60.0	9.81	30.6
Dundas	125.0	119.0	66.4	90.0	150.0	3.50	100.0	95.0	70.0	12.75	66.0
Durham	120.8	118.0	54.9	76.0	152.0	3.00	100.0	78.9	75.0	12.25	47.9
Elgin	120.4	122.5	54.2	72.6	150.0	3.84	92.7	80.7	69.7	10.12	51.7
Essex	118.9	117.0	50.6	70.0	135.0	3.25	100.0	74.4	67.9	13.05	52.1
Frontenac	121.7	119.0	54.8	77.2	158.0	3.20	110.0	83.6	78.3	9.95	63.9
Glengarry	125.0	120.0	67.4	90.0	160.0	3.46	.....	96.0	76.7	12.50	68.3
Grenville	120.0	118.0	65.0	83.8	150.0	3.31	100.0	90.0	76.7	11.78	67.8
Grey	121.8	119.4	53.0	72.2	145.0	3.50	90.0	78.8	60.0	9.76	63.1
Haldimand	125.7	122.6	50.9	74.7	153.0	3.58	94.0	81.2	72.6	9.44	61.9
Haliburton	120.0	120.0	59.6	85.0	164.0	3.60	93.3	88.0	60.0	11.38	76.0
Halton	123.3	120.0	54.0	76.5	150.0	3.50	100.0	84.0	73.2	12.40	50.8
Hastings	121.0	118.5	58.2	77.8	154.0	3.62	98.0	83.5	72.2	11.26	67.7
Huron	122.5	118.9	52.1	70.7	157.0	3.88	90.0	80.5	60.0	9.60	60.0
Kenora	120.0	115.0	60.0	75.0	150.0	.....	90.0	80.0	50.0	13.15	71.1
Kent	119.6	116.7	49.8	69.2	144.0	3.91	96.0	72.1	65.6	9.32	49.2
Lambton	122.5	120.0	51.2	70.0	156.0	3.92	96.0	75.0	62.3	10.12	53.3
Lanark	120.0	120.0	61.8	80.6	181.0	3.15	93.3	84.3	70.0	11.01	72.5
Leeds	126.0	124.0	60.7	82.8	150.0	3.58	100.0	82.5	77.8	11.13	64.6
Lennox and Addington	119.0	120.2	57.4	80.6	143.0	3.60	110.0	84.4	70.3	9.69	66.5
Lincoln	123.4	122.5	53.6	77.0	151.0	3.75	95.0	85.0	73.3	12.08	69.2
Manitoulin	120.0	118.0	61.5	84.0	149.0	3.00	100.0	86.2	50.0	10.22	55.4
Middlesex	124.0	119.3	52.3	72.4	134.0	3.87	90.0	80.4	68.0	10.96	51.5
Muskoka	125.0	123.7	64.7	83.3	170.0	3.00	100.0	81.7	60.0	13.96	65.4
Nipissing	125.0	118.0	60.2	83.3	158.0	3.00	100.0	85.0	50.0	13.21	68.7
Norfolk	121.8	125.0	53.7	74.1	125.0	3.46	92.2	80.9	72.6	10.80	52.0
Northumberland	122.9	118.9	58.6	74.9	139.0	3.42	94.2	80.2	75.0	11.06	59.4
Ontario	122.2	117.1	54.8	72.6	156.0	3.00	100.0	78.9	65.0	12.74	45.9
Oxford	120.8	117.5	55.6	73.9	145.0	3.54	90.0	80.5	69.6	10.60	59.5
Parry Sound	125.0	120.0	64.5	86.1	175.0	3.00	100.0	85.0	60.0	13.15	65.5
Peel	124.3	120.6	54.3	73.5	148.0	3.50	95.4	81.8	70.0	12.70	45.2
Perth	124.1	121.1	55.7	72.0	140.0	3.50	95.0	80.2	70.0	10.12	65.5
Peterborough	120.9	116.2	59.7	78.8	148.0	3.75	96.0	80.4	65.8	13.26	66.1
Prescott	125.0	125.0	63.8	96.4	160.0	3.13	100.0	90.0	72.0	11.74	67.3
Prince Edward	117.1	113.9	54.5	76.0	157.0	3.00	94.7	77.7	65.5	10.23	66.5
Rainy River	123.8	121.0	63.2	77.4	160.0	.....	90.0	88.0	.....	10.90	68.1
Renfrew	120.0	118.5	57.7	74.6	189.0	3.58	89.2	79.2	60.0	10.36	71.1
Russell	120.0	120.0	66.0	90.0	160.0	3.75	90.0	95.0	70.0	12.14	66.7
Simcoe	122.5	120.9	53.5	72.5	142.0	3.50	92.0	81.1	66.0	11.35	42.4
Stormont	120.0	119.0	65.0	82.1	150.0	3.33	90.0	90.0	68.3	13.15	68.7
Sudbury	125.0	120.0	63.5	81.3	169.0	3.00	100.0	95.0	50.0	15.01	68.1
Thunder Bay	120.0	115.0	61.9	78.8	180.0	3.00	98.0	85.0	50.0	14.76	77.5
Timiskaming	125.0	122.5	62.7	83.3	175.0	3.00	100.0	85.0	50.0	13.66	85.5
Victoria	118.8	116.0	55.2	70.8	149.0	3.50	96.0	77.8	70.0	14.24	54.4
Waterloo	121.8	119.5	58.9	73.2	136.0	3.50	93.7	79.5	66.0	11.53	60.5
Welland	123.3	121.7	55.8	76.8	125.0	3.25	100.0	83.6	66.3	10.65	70.4
Wellington	123.4	118.6	54.8	72.9	130.0	3.50	96.0	79.3	70.0	9.36	50.9
Wentworth	123.5	121.0	53.3	72.6	145.0	3.75	96.0	82.0	62.2	12.48	63.0
York	123.7	120.2	54.0	71.7	136.0	3.50	100.0	81.4	70.0	13.62	45.9
The Province:											
1928	122.0	119.2	55.5	74.2	152.8	3.83	95.2	81.5	68.1	11.23	55.8
1927	124.7	122.1	57.3	77.6	149.8	2.35	95.3	77.9	66.3	11.02	88.2

HORSES ON HAND

TABLE XX.—Showing by County Municipalities the number and value of Horses on hand, June 15th, 1928, together with the totals for the Province for the past five years.

Counties and Districts	Stallions, 2 yrs. old and over	Mares, 2 yrs. old and over	Geldings, 2 yrs. old and over	Colts and Fillies, under 2 years	Total Horses	
					Number	Value
						$
Algoma	30	1,515	1,086	195	2,826	348,594
Brant	24	4,046	3,787	513	8,370	888,145
Bruce	83	11,545	7,770	2,101	21,499	2,388,721
Carleton	89	8,068	6,142	1,569	15,868	1,874,524
Cochrane	12	391	174	49	626	88,885
Dufferin	53	5,595	4,233	1,015	10,896	1,187,996
Dundas	38	4,382	3,695	678	8,793	899,514
Durham	48	6,692	5,027	939	12,706	1,396,249
Elgin	55	7,773	6,116	1,111	15,055	1,599,513
Essex	147	8,644	6,212	1,382	16,385	1,897,631
Frontenac	60	4,437	3,316	722	8,535	835,651
Glengarry	76	4,287	2,716	882	7,961	877,147
Grenville	34	3,408	2,755	531	6,728	689,010
Grey	136	13,306	9,813	2,259	25,514	2,742,199
Haldimand	38	4,998	4,000	810	9,846	1,045,970
Haliburton	17	801	597	100	1,515	171,588
Halton	24	3,373	2,893	384	6,674	766,925
Hastings	79	8,414	7,190	1,025	16,708	1,802,038
Huron	111	14,196	9,875	2,828	27,010	3,034,758
Kenora	8	157	234	7	406	53,297
Kent	158	10,941	8,749	1,719	21,567	2,557,501
Lambton	92	10,758	7,335	2,392	20,577	2,327,108
Lanark	60	5,372	4,217	890	10,539	1,118,911
Leeds	47	5,226	4,411	674	10,358	1,041,251
Lennox and Addington	46	4,763	4,285	879	9,973	991,432
Lincoln	55	3,532	2,897	259	6,743	738,084
Manitoulin	13	1,010	867	177	2,067	227,649
Middlesex	172	14,207	10,277	2,861	27,517	2,949,312
Muskoka	22	1,542	1,235	148	2,947	359,799
Nipissing	70	1,298	862	120	2,350	302,704
Norfolk	78	6,205	5,341	767	12,391	1,263,422
Northumberland	71	7,551	6,431	941	14,994	1,614,126
Ontario	63	8,992	6,837	1,209	17,101	1,877,844
Oxford	78	9,340	7,655	1,260	18,333	2,022,975
Parry Sound	37	1,717	1,486	207	3,447	423,675
Peel	42	5,460	4,049	1,081	10,632	1,141,100
Perth	66	10,522	7,538	1,965	20,091	2,192,315
Peterborough	56	5,218	3,983	758	10,015	1,132,350
Prescott	81	3,960	2,457	590	7,088	795,788
Prince Edward	22	3,936	3,305	400	7,663	799,177
Rainy River	19	997	969	98	2,083	254,521
Renfrew	127	7,162	4,826	1,317	13,432	1,611,534
Russell	100	3,845	2,207	831	6,983	763,191
Simcoe	127	14,895	11,568	2,249	28,839	3,319,725
Stormont	46	3,565	2,773	456	6,840	701,104
Sudbury	62	1,404	780	136	2,382	316,760
Thunder Bay	40	770	810	48	1,668	207,600
Timiskaming	28	1,266	1,095	109	2,498	360,171
Victoria	48	6,255	4,656	915	11,874	1,314,672
Waterloo	59	6,500	5,250	1,082	12,891	1,339,349
Welland	54	3,863	3,216	320	7,453	806,105
Wellington	96	11,234	8,448	1,882	21,660	2,302,558
Wentworth	55	4,946	4,204	495	9,700	1,034,294
York	36	10,518	8,669	1,409	20,632	2,288,890
The Province:						
1928	3,388	314,798	241,319	49,744	609,249	67,085,352
1927	3,568	320,990	246,639	45,939	617,136	66,724,527
1926	3,515	328,924	251,958	45,262	629,659	68,2[illegible]
1925	3,512	335,469	259,247	45,910	644,138	69[illegible]
1924	3,671	344,370	266,560	49,274	663,875	

CATTLE AND

TABLE XXI.—Showing by County Municipalities the number and value of Cattle on

Counties and Districts	Bulls for breeding	Cows for milk purposes	Cows for beef purposes	Yearlings for milk purposes	Yearlings for beef purposes	Calves	All other Cattle
Algoma	280	6,373	292	1,511	1,658	3,432	738
Brant	820	15,675	550	4,054	1,896	5,982	579
Bruce	1,485	36,497	3,075	6,107	19,558	26,965	14,418
Carleton	2,347	48,499	2,255	10,445	5,382	17,107	5,223
Cochrane	130	1,076	30	305	42	582	63
Dufferin	630	15,670	1,417	2,654	8,369	11,038	4,523
Dundas	1,896	32,952	193	6,308	99	7,504	711
Durham	835	18,387	1,963	4,132	7,138	10,866	5,047
Elgin	1,580	30,880	1,296	7,099	4,094	11,837	4,731
Essex	757	20,461	1,026	4,560	1,121	5,744	582
Frontenac	1,851	29,613	1,146	5,716	2,170	11,702	1,180
Glengarry	2,121	33,150	718	6,557	328	7,736	604
Grenville	1,389	20,784	388	5,318	114	6,018	618
Grey	1,606	43,413	3,743	6,770	22,697	30,233	15,821
Haldimand	728	16,207	536	4,008	2,856	7,476	1,190
Haliburton	211	3,812	147	552	1,241	2,799	505
Halton	722	13,761	1,197	3,140	2,681	6,040	1,684
Hastings	2,908	47,232	1,589	9,982	2,531	18,686	2,185
Huron	1,668	39,331	3,643	6,929	19,484	27,197	15,719
Kenora	45	502	13	149	31	255	13
Kent	743	20,477	2,872	4,170	5,569	10,536	5,670
Lambton	1,061	32,303	2,841	5,423	14,072	21,531	12,997
Lanark	1,574	29,646	2,771	7,064	8,719	17,678	6,315
Leeds	2,349	38,883	570	8,466	633	11,632	1,266
Lennox & Addington	1,460	26,652	827	5,123	1,894	9,951	1,012
Lincoln	413	10,373	379	2,312	685	3,361	259
Manitoulin	203	4,034	214	630	2,273	3,062	1,108
Middlesex	2,279	53,055	3,739	10,854	15,187	26,727	16,257
Muskoka	358	7,009	354	1,547	1,376	3,957	893
Nipissing	795	7,717	425	1,879	1,112	4,389	606
Norfolk	931	20,550	530	5,169	884	6,418	1,037
Northumberland	1,499	28,311	1,833	6,908	4,552	12,457	2,329
Ontario	1,340	29,133	2,744	5,964	10,364	16,372	5,013
Oxford	2,465	47,938	1,758	10,359	3,841	14,885	3,147
Parry Sound	349	8,092	392	1,912	2,589	5,455	1,552
Peel	923	20,480	955	4,868	2,820	7,227	2,383
Perth	1,778	37,208	1,930	8,853	10,083	20,195	5,901
Peterborough	1,095	23,424	1,164	5,103	5,147	11,939	2,675
Prescott	1,923	30,714	665	6,295	389	8,519	615
Prince Edward	954	16,545	537	3,309	402	5,036	187
Rainy River	212	3,805	162	1,030	709	2,064	180
Renfrew	2,486	32,727	3,559	7,113	9,663	21,002	5,891
Russell	1,578	26,241	517	6,009	1,021	7,337	815
Simcoe	1,855	44,073	3,282	9,316	16,979	25,387	9,098
Stormont	1,721	29,847	459	5,026	140	5,782	587
Sudbury	700	6,999	447	1,751	741	3,920	302
Thunder Bay	147	4,364	93	1,030	139	1,504	36
Timiskaming	392	4,872	404	1,463	1,205	3,159	167
Victoria	720	21,439	1,620	3,940	9,569	13,735	6,824
Waterloo	1,092	20,863	636	4,956	4,515	10,324	1,314
Welland	543	12,578	432	2,712	954	3,835	396
Wellington	1,466	30,863	3,498	5,198	14,794	21,253	6,818
Wentworth	988	18,128	670	4,029	1,858	5,857	814
York	1,820	37,766	1,643	8,547	3,218	11,081	2,735
The Province:							
1928	64,221	*1,261,384	70,139	264,624	261,586	576,766	183,333
1927	65,636	*1,294,840	70,890	263,791	271,435	557,706	185,656
1926	66,854	*1,280,436	77,024	262,935	284,796	569,645	216,109
1925	68,515	*1,232,679	89,014	264,104	292,210	575,466	287,385
1924	70,838	1,203,527	100,982	271,755	306,463	592,408	371,329

1927 ... ing dual purpose cows.

SHEEP ON HAND

hand, June 15th, 1928, together with the totals for the Province for the past five years.

Total Cattle		Sheep and Lambs					Counties and Districts
Number	Value	Ewes for breeding	1 year and over	Under 1 year	Total Sheep and Lambs		
					Number	Value	
	$					$	
14,284	614,089	4,159	681	4,464	9,304	89,628	Algoma
29,556	1,629,600	5,081	590	5,611	11,282	136,657	Brant
108,105	5,095,127	22,793	2,984	24,052	49,829	563,937	Bruce
91,258	4,366,136	11,506	1,178	11,492	24,176	265,247	Carleton
2,228	102,725	79	53	117	249	2,667	Cochrane
44,301	2,015,021	15,729	2,276	16,948	34,953	415,899	Dufferin
49,663	2,716,707	1,631	172	1,680	3,483	37,154	Dundas
48,368	2,275,924	12,955	2,412	13,731	29,098	361,474	Durham
61,517	3,269,688	10,912	1,096	10,802	22,810	259,138	Elgin
34,251	1,916,209	8,192	1,580	9,287	19,059	192,761	Essex
53,378	2,265,352	8,103	1,069	8,367	17,539	170,618	Frontenac
51,214	2,612,929	2,091	757	2,400	5,248	54,131	Glengarry
34,629	1,757,234	4,150	487	4,268	8,905	94,675	Grenville
124,283	5,534,049	33,031	3,566	35,726	72,323	830,063	Grey
33,001	1,730,009	6,567	808	7,363	14,738	158,675	Haldimand
9,267	321,563	2,415	376	2,533	5,324	50,862	Haliburton
29,225	1,645,809	6,292	666	6,521	13,479	158,064	Halton
85,113	3,524,054	17,509	2,126	17,684	37,319	364,723	Hastings
113,971	5,398,762	13,508	1,801	14,867	30,176	354,707	Huron
1,008	41,721	60	19	53	132	1,346	Kenora
50,037	2,481,186	7,631	1,375	8,047	17,053	186,397	Kent
90,228	4,348,708	16,338	2,165	16,904	35,407	411,041	Lambton
73,767	2,997,977	18,339	2,170	18,178	38,687	435,350	Lanark
63,799	3,135,776	6,031	895	6,035	12,961	146,134	Leeds
46,919	2,166,123	7,913	1,116	7,980	17,009	174,382	Lennox and Addington
17,782	1,023,009	4,009	442	4,121	8,572	97,303	Lincoln
11,524	453,604	7,315	633	7,806	15,754	146,739	Manitoulin
128,098	6,586,756	12,994	3,294	13,955	30,243	364,161	Middlesex
15,494	608,950	3,744	576	3,664	7,984	77,223	Muskoka
16,923	578,098	3,695	696	3,968	8,359	70,458	Nipissing
35,519	1,834,156	4,026	729	4,179	8,934	88,654	Norfolk
57,889	2,809,097	8,385	2,015	7,915	18,315	207,625	Northumberland
70,930	3,469,933	19,089	3,157	18,750	40,996	503,634	Ontario
84,393	4,960,122	4,322	777	4,509	9,608	117,028	Oxford
20,341	767,505	7,573	982	7,890	16,445	156,019	Parry Sound
39,656	2,347,669	6,125	912	6,748	13,785	155,289	Peel
85,948	4,190,425	3,833	753	4,774	9,360	111,271	Perth
50,547	2,169,373	6,433	1,296	6,768	14,497	155,940	Peterborough
49,120	2,302,501	2,025	639	2,481	5,145	43,210	Prescott
26,970	1,468,163	5,241	692	5,350	11,283	123,588	Prince Edward
8,162	314,804	2,026	177	2,227	4,430	43,006	Rainy River
82,441	2,900,078	29,408	4,668	30,500	64,576	614,479	Renfrew
43,518	2,047,499	2,873	492	2,809	6,174	57,691	Russell
109,990	4,921,134	25,549	3,937	27,487	56,973	627,488	Simcoe
43,562	2,214,291	929	216	981	2,126	20,511	Stormont
14,860	544,535	1,775	717	2,283	4,775	42,885	Sudbury
7,313	364,157	280	46	275	601	5,576	Thunder Bay
11,662	504,565	2,789	415	2,771	5,975	62,928	Timiskaming
57,847	2,441,146	13,433	1,998	13,661	29,092	325,043	Victoria
43,700	2,246,037	2,280	353	2,627	5,260	58,774	Waterloo
21,450	1,163,937	2,795	351	2,959	6,105	63,986	Welland
83,890	4,035,720	16,866	2,843	18,927	38,636	483,600	Wellington
32,344	1,866,289	3,610	506	3,664	7,780	89,037	Wentworth
66,810	3,841,649	14,700	1,562	15,518	31,780	380,996	York
							The Province:
2,682,053	128,937,680	461,137	68,292	484,677	1,014,106	11,209,872	1928
2,709,954	117,162,152	431,307	63,622	461,338	956,267	10,433,761	1927
2,757,799	115,386,214	408,077	52,050	426,356	886,483	9,688,685	1926
2,809,373	115,844,069	406,894	43,653	417,979	868,526	9,576,722	1925
2,917,302	113,046,599	440,380		429,899	870,279	7,081,500	1924

SWINE ON HAND

TABLE XXII.—Showing by County Municipalities the number and value of Swine on hand, June 15th, 1928, together with the totals for the Province for the past five years.

Counties and Districts	Brood Sows	Other Swine		Total Swine	
		Six mos. and over	Under six mos.	Number	Value
					$
Algoma	498	399	3,164	4,061	44,246
Brant	2,375	2,188	17,531	22,094	244,983
Bruce	6,449	7,095	47,681	61,225	716,595
Carleton	4,163	1,888	28,953	35,004	371,166
Cochrane	90	64	595	749	8,147
Dufferin	3,903	5,520	28,800	38,223	442,371
Dundas	2,508	2,952	18,614	24,074	246,721
Durham	3,380	4,486	24,810	32,676	373,393
Elgin	5,415	7,840	40,182	53,437	568,661
Essex	8,705	16,009	57,223	81,937	846,720
Frontenac	2,324	2,181	15,165	19,670	198,327
Glengarry	2,402	2,537	17,729	22,668	237,053
Grenville	1,630	1,375	12,097	15,102	152,303
Grey	8,379	10,061	61,182	79,622	929,057
Haldimand	2,620	2,220	18,689	23,529	256,552
Haliburton	311	246	1,827	2,384	25,332
Halton	1,925	2,551	14,866	19,342	220,874
Hastings	5,887	6,083	43,272	55,242	558,054
Huron	8,950	10,564	66,631	86,145	971,792
Kenora	66	19	368	453	4,824
Kent	10,328	19,836	71,981	102,145	1,046,969
Lambton	7,112	10,129	54,620	71,861	756,129
Lanark	2,571	2,110	18,341	23,022	224,888
Leeds	2,561	2,565	18,271	23,397	228,860
Lennox and Addington	2,504	1,791	17,780	22,075	216,172
Lincoln	1,403	1,152	9,752	12,307	133,991
Manitoulin	486	397	3,202	4,085	34,172
Middlesex	7,767	7,320	58,450	73,537	761,939
Muskoka	398	284	2,407	3,089	32,689
Nipissing	780	634	4,579	5,993	62,454
Norfolk	3,173	3,882	23,225	30,280	299,841
Northumberland	4,631	3,331	34,523	42,485	453,618
Ontario	6,098	8,924	42,908	57,930	667,346
Oxford	6,697	7,650	50,671	65,018	705,250
Parry Sound	620	460	4,216	5,296	57,662
Peel	2,454	2,735	19,278	24,467	268,149
Perth	8,174	9,145	60,814	78,133	881,923
Peterborough	2,682	1,987	18,964	23,633	251,758
Prescott	2,118	2,319	15,423	19,860	215,383
Prince Edward	2,338	1,434	15,839	19,611	205,455
Rainy River	318	235	1,808	2,361	26,499
Renfrew	3,558	2,936	23,009	29,503	276,810
Russell	2,296	1,834	15,284	19,414	184,381
Simcoe	9,595	11,968	67,375	88,938	994,217
Stormont	2,422	2,375	17,109	21,906	220,005
Sudbury	826	573	4,328	5,727	62,875
Thunder Bay	311	171	2,040	2,522	28,260
Timiskaming	664	533	3,809	5,006	55,077
Victoria	3,204	4,189	23,480	30,873	335,205
Waterloo	5,608	7,493	38,549	51,650	577,836
Welland	1,734	1,561	11,049	14,344	166,524
Wellington	8,624	10,165	63,923	82,712	935,855
Wentworth	2,901	2,948	21,462	27,311	298,898
York	7,054	9,243	49,113	65,410	724,629
The Province:					
1928	195,990	230,587	1,406,961	1,833,538	19,808,890
1927	207,052	260,803	1,415,322	1,883,177	24,159,535
1926	199,637	264,639	1,271,079	1,735,355	24,525,126
1925	190,210	323,449	1,164,936	1,678,595	24,424,238
1924	199,860	1,608,043		1,807,903	16,201,699

POULTRY ON HAND

TABLE XXIII.—Showing by County Municipalities the number and value of Poultry on hand, June 15th, 1928, together with the totals for the Province for the past five years.

Counties and Districts	Turkeys	Geese	Ducks	Other Fowls	Total Poultry	
					Number	Value
						$
Algoma	3,006	1,654	1,090	74,501	80,251	52,551
Brant	2,140	6,686	6,763	243,251	258,840	161,183
Bruce	23,777	22,141	22,456	577,606	645,980	426,424
Carleton	14,525	21,051	16,435	389,326	441,337	307,539
Cochrane	264	104	48	10,964	11,380	7,327
Dufferin	2,798	18,532	7,714	203,447	232,491	159,135
Dundas	12,602	9,785	7,115	331,323	360,825	227,555
Durham	2,729	13,973	10,137	368,340	395,179	248,951
Elgin	13,079	13,276	13,806	540,240	580,401	366,678
Essex	13,629	23,366	31,575	804,450	873,020	513,194
Frontenac	33,899	3,842	5,358	176,060	219,159	164,966
Glengarry	17,775	3,014	6,563	199,532	226,884	156,061
Grenville	10,565	7,022	5,707	215,213	238,507	159,026
Grey	15,573	31,161	26,452	639,254	712,440	455,476
Haldimand	12,621	7,721	10,297	362,597	393,236	246,119
Haliburton	2,136	1,037	488	23,607	27,268	19,672
Halton	2,604	9,894	5,894	196,893	215,285	149,787
Hastings	14,729	12,900	7,459	435,596	470,684	291,611
Huron	7,999	25,738	31,365	921,879	986,981	592,564
Kenora	376	66	119	10,155	10,716	6,667
Kent	14,567	19,855	33,905	840,185	908,512	535,267
Lambton	36,203	28,571	31,306	875,390	971,470	595,301
Lanark	15,243	5,153	5,085	273,972	299,453	201,385
Leeds	24,690	5,484	7,830	267,404	305,408	206,374
Lennox and Addington	9,659	4,818	6,604	297,473	318,554	194,215
Lincoln	6,711	4,928	7,063	244,174	262,876	163,632
Manitoulin	10,022	1,751	710	38,481	50,964	42,026
Middlesex	35,179	28,626	33,312	950,851	1,047,968	662,916
Muskoka	1,448	944	982	72,269	75,643	49,129
Nipissing	444	1,374	930	51,161	53,909	35,154
Norfolk	8,318	5,444	10,677	445,995	470,434	282,121
Northumberland	6,788	10,342	10,176	431,190	458,496	280,869
Ontario	5,780	20,422	16,075	430,812	473,089	325,962
Oxford	1,993	12,836	16,433	656,649	687,911	411,057
Parry Sound	1,689	2,642	1,085	65,699	71,115	49,359
Peel	5,255	16,015	10,410	327,619	359,299	229,873
Perth	2,430	21,119	20,666	625,722	669,937	401,809
Peterborough	13,556	9,660	5,885	230,637	259,738	174,353
Prescott	11,266	6,125	3,172	179,320	199,883	141,652
Prince Edward	7,389	3,068	5,911	206,490	222,858	140,102
Rainy River	3,566	1,081	700	50,350	55,697	37,022
Renfrew	15,689	12,420	4,946	281,376	314,431	206,896
Russell	1,798	9,304	5,474	169,154	185,730	114,909
Simcoe	15,450	32,844	21,413	635,608	705,315	459,336
Stormont	9,231	3,845	4,089	258,364	275,529	172,110
Sudbury	784	1,115	365	50,443	52,707	32,939
Thunder Bay	993	1,052	622	58,494	61,161	36,536
Timiskaming	1,487	1,800	1,610	53,330	58,227	41,021
Victoria	8,499	13,924	7,148	279,542	309,113	198,118
Waterloo	290	7,293	7,033	342,810	357,426	204,485
Welland	2,221	4,260	10,470	282,243	299,194	186,205
Wellington	2,349	27,945	14,149	502,060	546,503	341,505
Wentworth	2,894	6,745	8,562	269,984	288,185	185,837
York	5,495	24,647	25,511	590,324	645,977	400,242
The Province:						
1928	496,202	590,415	557,150	18,059,809	19,703,576	12,452,203
1927	496,164	594,593	578,721	17,378,567	19,048,045	12,333,645
1926	469,981	567,151	544,130	16,111,738	17,693,000	12,400,985
1925	480,612	555,720	558,742	16,183,507	17,778,581	13,527,454
1924	484,575	520,390	559,199	15,187,181	16,751,345	13,446,621

FARM PROPERTY, IMPLEMENTS AND LIVE STOCK

TABLE XXIV.—Showing by County Municipalities of Ontario the value of farm lands, buildings, implements and live stock for 1928, together with the totals for the Province for 1927.

Counties and Districts	Land	Buildings	Implements	Live Stock on hand	Total
	$	$	$	$	$
Algoma	4,440,122	1,859,726	803,526	1,149,108	8,252,482
Brant	12,169,007	7,488,844	2,269,246	3,060,568	24,987,665
Bruce	33,172,158	18,059,679	5,413,713	9,190,804	65,836,354
Carleton	28,554,374	14,046,699	4,763,441	7,184,612	54,549,126
Cochrane	1,689,979	401,001	217,373	209,751	2,518,104
Dufferin	13,804,093	8,890,232	2,512,117	4,220,422	29,426,864
Dundas	11,898,935	6,994,745	2,707,412	4,127,651	25,728,743
Durham	15,306,358	9,661,211	3,078,460	4,655,991	32,702,020
Elgin	25,137,202	13,903,383	4,381,235	6,063,678	49,485,498
Essex	41,124,865	18,905,962	6,007,781	5,366,515	71,405,123
Frontenac	10,264,024	4,999,674	1,947,341	3,634,914	20,845,953
Glengarry	12,641,719	6,613,169	2,454,451	3,937,321	25,646,660
Grenville	7,991,402	4,980,808	1,872,926	2,852,248	17,697,384
Grey	36,046,161	22,063,810	6,549,312	10,490,844	75,150,127
Haldimand	13,743,288	8,607,018	2,826,651	3,437,325	28,614,282
Haliburton	2,212,903	681,994	360,829	589,017	3,844,743
Halton	13,699,348	8,165,181	2,411,937	2,941,459	27,217,925
Hastings	19,635,707	10,659,227	4,234,815	6,540,480	41,070,229
Huron	36,515,851	22,322,665	7,129,914	10,352,583	76,321,013
Kenora	622,835	255,117	126,640	107,855	1,112,447
Kent	47,403,826	20,822,184	7,403,365	6,807,320	82,436,695
Lambton	35,274,012	16,952,368	6,071,769	8,438,287	66,736,436
Lanark	12,667,022	6,113,253	2,564,823	4,978,511	26,323,609
Leeds	14,346,475	7,314,439	2,578,597	4,758,395	28,997,906
Lennox and Addington	11,392,751	6,132,265	2,393,253	3,742,324	23,660,593
Lincoln	16,625,520	8,863,887	2,541,141	2,156,019	30,186,567
Manitoulin	2,977,127	1,061,811	429,355	904,190	5,372,483
Middlesex	44,654,680	24,936,286	7,517,531	11,325,084	88,433,581
Muskoka	4,617,250	1,925,785	811,740	1,127,790	8,482,565
Nipissing	4,196,036	1,602,195	853,990	1,048,868	7,701,089
Norfolk	16,818,234	9,231,354	3,270,984	3,768,194	33,088,766
Northumberland	16,436,951	10,146,282	3,589,125	5,365,335	35,537,693
Ontario	23,039,488	13,900,564	4,416,430	6,844,719	48,201,201
Oxford	27,120,027	17,894,473	5,727,482	8,216,432	58,958,414
Parry Sound	4,496,332	1,991,135	895,984	1,454,220	8,837,671
Peel	20,110,528	11,817,374	3,397,094	4,142,080	39,467,076
Perth	27,202,002	19,667,329	5,678,010	7,777,743	60,325,084
Peterborough	14,569,851	7,609,396	2,363,533	3,883,774	28,426,554
Prescott	14,918,106	6,786,378	2,469,064	3,498,534	27,672,082
Prince Edward	9,012,523	5,636,796	2,378,477	2,736,485	19,764,281
Rainy River	3,829,858	1,180,577	584,574	675,852	6,270,861
Renfrew	18,352,127	8,199,496	3,873,616	5,609,797	36,035,036
Russell	11,913,938	5,557,092	2,003,793	3,167,671	22,642,494
Simcoe	40,823,880	23,346,021	7,474,305	10,321,900	81,966,106
Stormont	9,783,534	5,981,421	2,367,228	3,328,021	21,460,204
Sudbury	5,364,778	1,758,877	949,708	999,994	9,073,357
Thunder Bay	4,031,852	1,460,233	638,201	642,129	6,772,415
Timiskaming	5,824,150	1,703,207	986,370	1,023,762	9,537,489
Victoria	16,518,129	8,073,368	2,859,219	4,614,184	32,064,900
Waterloo	17,687,896	12,519,372	3,306,205	4,426,481	37,939,954
Welland	13,891,854	8,470,893	2,642,001	2,386,757	27,391,505
Wellington	27,905,045	20,518,132	5,215,646	8,099,238	61,738,061
Wentworth	17,805,129	9,741,925	3,194,222	3,474,355	34,215,631
York	38,030,164	19,732,958	5,665,304	7,636,406	71,064,832
The Province:					
1928	940,311,406	518,209,271	171,181,259	239,493,997	1,869,195,933
1927	906,811,595	506,981,024	168,842,552	230,813,620	1,813,448,791

APPENDIX

Comparative Farm Statistics for Forty-seven Years—1882 to 1928

STATISTICS OF FARM CROPS

Fall Wheat and Spring Wheat

The following table gives the area, produce and market value of fall wheat and spring wheat for the years 1882 to 1928, together with the annual average for the various periods of ten years, and the average for the forty-seven years.

Years	Fall Wheat				Spring Wheat			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market Value
				$				$
1928	693,660	16,766,408	24.2	20,456,753	109,805	2,181,855	19.9	2,599,815
1927	751,377	19,447,536	25.9	24,254,806	119,580	2,408,055	20.1	2,939,777
1926	807,015	20,988,030	26.0	26,262,506	115,497	2,166,054	18.8	2,708,690
1925	747,101	22,764,736	30.5	30,420,639	113,338	2,440,632	21.5	3,245,576
1924	722,366	21,396,621	29.6	28,646,679	101,401	1,948,853	19.2	2,669,773
1923	717,307	16,599,067	23.1	15,976,322	111,601	1,937,937	17.4	1,865,540
1922	813,935	17,792,958	21.9	18,616,746	124,206	2,099,503	16.9	2,207,565
1921	621,420	13,667,879	22.0	15,096,980	152,904	1,907,459	12.5	2,087,264
1920	762,371	18,492,013	24.3	35,759,610	267,367	4,480,472	16.8	8,237,182
1919	619,494	15,051,703	24.3	35,698,096	361,150	5,646,544	15.6	13,603,841
1918	362,616	7,054,845	19.5	14,877,794	351,423	8,186,191	23.3	17,076,203
1917	585,946	13,384,207	22.8	28,078,738	182,957	3,679,516	20.1	7,716,693
1916	704,867	14,942,050	21.2	24,099,591	144,305	2,213,961	15.3	3,591,681
1915	811,185	24,737,011	30.5	24,023,286	162,142	3,439,949	21.2	3,392,996
1914	685,692	14,333,548	20.9	15,641,232	118,607	2,169,425	18.3	2,340,520
1913	646,533	15,945,717	24.7	13,550,459	116,581	2,068,951	17.7	1,818,652
1912	759,888	15,039,885	19.8	13,795,968	123,080	2,302,339	18.7	2,072,266
1911	837,492	17,926,586	21.4	15,519,411	133,711	2,295,534	17.2	2,081,580
1910	743,473	19,837,172	26.7	17,172,678	129,319	2,489,833	19.3	2,229,999
1909	663,375	15,967,653	24.1	16,335,950	135,161	2,223,567	16.5	2,237,189
1908	679,642	16,430,476	24.2	14,649,061	142,124	2,197,716	15.5	1,996,230
1907	676,164	15,545,491	23.0	14,410,670	144,514	2,473,651	17.1	2,137,234
1906	787,287	18,841,774	23.9	13,321,134	171,745	3,267,000	19.0	2,250,963
1905	796,213	17,933,961	22.5	13,719,480	190,116	3,582,627	18.8	2,683,387
1904	605,458	9,160,623	15.1	9,041,535	225,027	3,471,103	15.4	3,269,779
1903	665,028	17,242,763	25.9	12,949,315	248,518	4,650,707	18.7	3,460,126
1902	748,592	20,233,669	27.0	14,305,204	303,115	6,048,024	20.0	4,209,425
1901	911,587	15,943,229	17.5	10,538,474	358,048	5,498,751	15.4	3,673,166
1900	1,068,640	23,369,737	21.9	15,517,505	376,905	6,940,333	18.4	4,684,725
1899	1,049,691	14,439,827	13.8	9,631,365	398,726	7,041,317	17.7	4,682,476
1898	1,048,182	25,158,713	24.0	17,460,147	389,205	6,873,785	17.7	4,756,659
1897	950,222	23,988,051	25.2	18,758,656	323,305	4,868,101	15.1	3,826,327
1896	876,955	15,078,441	17.2	10,705,693	255,361	3,519,322	13.8	2,484,641
1895	743,199	14,155,282	19.0	9,809,610	223,957	3,472,543	15.5	2,423,835
1894	778,992	16,512,106	21.2	9,081,658	230,016	3,367,854	14.6	1,869,159
1893	913,954	17,545,248	19.2	10,509,604	356,721	4,186,063	11.7	2,486,521
1892	966,522	20,492,497	21.2	14,488,195	651,302	8,290,395	12.7	5,620,888
1891	849,956	21,872,488	25.7	20,800,736	510,634	10,711,538	21.0	9,951,019
1890	720,101	14,267,383	19.8	13,439,875	601,753	7,683,905	12.8	7,015,405
1889	822,115	13,001,865	15.8	11,493,648	398,610	5,697,707	14.3	5,019,680
1888	826,537	13,830,787	16.7	14,162,726	367,850	6,453,559	17.5	6,408,384
1887	897,743	14,440,611	16.1	11,321,439	484,821	5,633,117	11.6	4,393,831
1886	886,402	18,071,142	20.4	13,300,361	577,465	9,518,553	16.5	6,900,951
1885	875,136	21,478,281	24.5	17,504,799	799,463	9,129,881	11.4	7,358,684
1884	864,740	20,717,631	24.0	16,677,693	721,647	14,609,661	20.2	11,892,264
1883	1,097,210	11,656,957	10.6	12,239,805	586,410	9,726,063	16.6	10,406,887
1882	1,188,520	31,255,202	26.3	31,567,754	586,817	9,665,999	16.5	10,245,959
Annual Averages:								
1922–1928	750,394	19,393,622	25.8	23,519,207	113,633	2,168,984	19.1	2,605,248
1912–1921	656,001	15,264,886	23.3	22,062,175	198,052	3,609,481	18.2	6,193,730
1902–1911	720,272	16,912,017	23.5	14,142,444	182,335	3,269,976	17.9	2,655,591
1892–1901	930,794	18,668,313	20.1	12,650,091	356,355	5,405,846	15.2	3,650,840
1882–1891	902,846	18,059,235	20.0	16,250,884	563,547	8,882,998	15.8	7,959,306
1882–1928	794,721	17,548,933	22.1	17,355,115	293,581	4,826,934	16.4	4,741,094

STATISTICS OF FARM CROPS

Oats and Barley

The following table gives the area, produce and market value of Oats and Barley for the years 1882 to 1928, together with the annual averages for the various periods of ten years and the average for the forty-seven years.

Years	Oats				Barley			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	2,659,980	93,461,068	35.1	51,912,665	615,433	19,944,133	32.4	14,790,285
1927	2,689,295	101,913,746	37.9	58,438,236	514,802	17,238,125	33.5	13,382,864
1926	2,831,755	95,722,130	33.8	49,615,846	449,095	14,447,174	32.2	9,823,171
1925	2,837,390	118,100,471	41.6	53,404,626	436,383	14,917,247	34.2	10,160,463
1924	2,891,990	114,249,129	39.5	61,899,999	439,177	14,570,403	33.2	11,970,808
1923	2,967,417	103,485,442	34.9	46,937,124	452,490	13,523,349	29.9	8,487,609
1922	3,034,090	116,033,569	38.2	50,450,114	433,922	13,971,811	32.2	8,561,782
1921	3,094,958	72,575,191	23.4	36,555,194	462,176	10,149,353	22.0	6,665,865
1920	2,880,053	129,171,312	44.9	75,159,913	484,328	16,660,350	34.4	15,631,613
1919	2,674,341	78,388,018	29.3	76,572,899	569,183	13,133,757	23.1	19,146,902
1918	2,924,468	131,752,601	45.1	98,798,745	660,404	24,247,673	36.7	25,112,912
1917	2,763,355	111,232,817	40.3	86,640,057	551,298	18,387,741	33.4	23,118,166
1916	2,689,762	71,297,528	26.5	47,066,428	527,886	12,388,969	23.5	12,621,940
1915	2,871,755	120,217,952	41.9	47,452,121	552,318	19,893,129	36.0	11,130,811
1914	2,776,883	103,564,322	37.3	51,232,043	579,473	18,096,754	31.2	11,640,790
1913	2,699,459	98,426,902	36.5	36,342,489	623,658	18,255,958	29.3	10,136,759
1912	2,601,735	98,444,807	37.8	38,005,016	647,382	19,232,275	29.7	11,296,962
1911	2,699,230	84,829,232	31.4	37,494,695	616,977	16,248,129	26.3	12,000,154
1910	2,757,933	102,084,924	37.0	35,698,964	626,144	19,103,107	30.5	9,930,410
1909	2,695,585	90,235,579	33.5	35,612,676	695,262	18,776,777	27.0	10,286,328
1908	2,774,259	96,626,419	34.8	38,987,985	734,029	20,888,569	28.5	10,943,788
1907	2,932,509	83,524,301	28.5	40,759,859	766,891	21,718,332	28.3	12,900,689
1906	2,716,711	108,341,455	39.9	36,836,095	756,163	25,253,011	33.4	11,363,855
1905	2,668,416	105,563,572	39.6	35,469,360	772,633	24,265,394	31.4	10,409,854
1904	2,654,936	102,173,443	38.5	33,002,022	772,434	24,567,825	31.8	10,736,140
1903	2,638,665	109,874,053	41.6	32,193,097	709,839	24,378,817	34.3	10,263,482
1902	2,500,758	106,431,439	42.6	37,038,141	661,622	21,890,602	33.1	9,872,661
1901	2,408,264	78,334,490	32.5	28,357,085	637,201	16,761,076	26.3	7,542,484
1900	2,398,834	89,693,327	37.4	23,768,732	577,810	16,909,751	29.3	6,577,893
1899	2,363,778	89,897,724	38.0	24,901,670	490,374	14,830,891	30.2	5,858,202
1898	2,376,360	86,858,293	36.6	22,409,440	438,784	12,663,668	28.9	4,812,194
1897	2,432,491	86,318,128	35.5	19,507,897	451,515	12,021,779	26.6	3,245,880
1896	2,425,107	82,979,992	34.2	16,595,998	462,792	12,669,744	27.4	4,003,639
1895	2,373,309	84,697,566	35.7	24,646,992	478,046	12,090,507	25.3	4,884,565
1894	2,342,766	70,172,516	30.0	21,613,135	486,261	10,980,404	22.6	4,447,064
1893	1,936,644	58,584,529	30.3	19,450,064	467,315	9,806,088	21.0	3,932,241
1892	1,861,469	64,758,053	34.8	19,945,480	499,225	12,274,318	24.6	5,069,293
1891	1,840,636	75,009,542	40.8	27,378,483	553,166	16,141,904	29.2	7,925,675
1890	1,882,366	52,768,207	28.0	21,687,734	701,326	15,600,169	22.2	7,831,285
1889	1,923,444	64,346,301	33.5	19,625,622	875,286	23,386,388	26.7	10,290,011
1888	1,849,868	65,466,911	35.4	26,514,099	895,432	23,366,569	26.1	14,043,308
1887	1,682,463	49,848,101	29.6	17,247,443	767,346	17,134,830	22.3	9,715,448
1886	1,621,901	58,665,608	36.2	18,772,995	735,778	19,512,278	26.5	10,009,799
1885	1,543,745	55,229,742	35.8	17,397,369	597,873	16,533,587	27.7	9,126,540
1884	1,481,828	57,696,304	38.9	19,097,476	700,472	19,119,041	27.3	10,247,806
1883	1,418,309	54,573,609	38.5	20,737,971	757,156	18,414,337	24.3	10,496,172
1882	1,387,487	50,501,701	36.4	21,715,731	848,617	24,284,407	28.6	15,784,865
Annual Averages:								
1922–1928	2,844,560	106,137,936	37.3	53,236,944	477,329	15,516,035	32.5	11,025,283
1912–1921	2,797,677	101,507,145	36.3	59,382,491	565,811	17,044,596	30.1	14,650,272
1902–1911	2,703,900	98,968,442	36.6	36,309,289	711,199	21,709,056	30.5	10,870,736
1892–1901	2,291,902	79,229,462	34.6	22,119,649	498,932	13,100,823	26.3	5,037,346
1882–1891	1,663,205	58,410,603	35.1	21,017,492	743,245	19,349,351	26.0	10,547,091
1882–1928	2,435,718	87,747,278	36.0	37,466,975	607,089	17,460,649	28.8	10,387,903

STATISTICS OF FARM CROPS

Peas and Beans

The following table gives the area, produce and market value of Peas and Beans for the years 1882 to 1928, together with the annual average for the various periods of ten years, and the average for the forty-seven years.

Years	Peas				Beans			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	109,887	1,892,588	17.2	2,892,490	50,953	873,427	17.1	3,343,825
1927	105,662	2,035,687	19.3	3,049,924	47,156	725,011	15.4	1,700,257
1926	97,865	1,880,301	19.2	2,831,588	51,721	819,166	15.8	1,913,221
1925	133,434	2,607,287	19.5	3,532,258	61,080	1,154,317	18.9	2,431,446
1924	130,989	2,456,164	18.8	3,712,042	52,047	856,860	16.5	1,958,602
1923	117,409	2,030,850	17.3	2,940,685	41,127	633,713	15.4	1,538,701
1922	105,544	2,076,965	19.7	2,914,720	39,999	622,781	15.6	1,579,549
1921	105,964	1,441,095	13.6	2,205,423	26,509	427,531	16.1	1,005,057
1920	109,187	2,209,523	20.2	4,270,938	22,744	380,499	16.7	1,097,137
1919	127,253	1,816,517	14.3	4,794,268	22,920	288,480	12.6	1,154,081
1918	113,862	2,381,937	20.9	5,184,332	100,082	1,387,834	13.9	6,230,007
1917	90,322	1,512,567	16.7	4,855,888	110,680	1,078,510	9.7	7,446,626
1916	95,542	1,243,979	13.4	2,618,754	53,999	583,105	10.8	3,183,086
1915	126,943	2,043,049	16.1	3,302,641	62,863	882,819	14.0	2,745,105
1914	177,856	2,609,585	14.7	3,565,974	51,149	835,895	16.3	1,787,432
1913	177,303	3,108,263	17.5	3,127,551	66,639	1,021,243	15.3	1,738,900
1912	221,524	3,667,005	16.6	4,047,354	69,703	1,182,132	17.0	2,280,173
1911	304,491	4,462,182	14.7	4,380,883	51,508	898,212	17.4	1,711,089
1910	403,414	6,016,003	14.9	4,856,986	49,778	892,927	17.9	1,386,798
1909	381,609	7,613,656	20.0	6,437,685	45,029	826,344	18.4	1,334,325
1908	396,642	7,401,336	18.7	6,121,449	46,477	783,757	16.9	1,160,103
1907	340,977	7,365,036	21.6	5,744,728	47,562	790,269	16.6	1,201,209
1906	410,356	7,388,987	18.0	5,216,625	51,272	950,312	18.5	1,320,934
1905	374,518	7,100,021	19.0	4,636,314	50,543	846,443	16.7	1,117,305
1904	339,260	6,629,866	19.5	4,176,816	50,892	912,849	17.9	1,113,676
1903	407,133	8,924,650	21.9	5,738,550	53,039	978,246	18.4	1,379,327
1902	532,639	7,664,679	14.4	5,441,922	53,964	670,633	12.4	905,355
1901	602,724	10,089,173	16.7	6,588,230	53,688	824,122	15.4	1,030,153
1900	661,592	14,058,198	21.2	8,027,231	44,053	820,373	18.6	817,912
1899	743,139	15,140,790	20.4	8,675,673	40,485	651,009	16.1	703,090
1898	865,951	13,521,263	15.6	7,058,099	45,220	759,657	16.8	531,760
1897	896,735	13,867,093	15.5	5,838,046	50,591	981,340	19.4	639,834
1896	829,601	17,493,148	21.1	7,696,985	68,369	1,197,535	17.5	819,114
1895	799,963	15,568,103	19.5	8,531,320	72,747	1,494,179	20.5	1,414,988
1894	785,007	14,022,888	17.9	7,516,268	59,281	827,514	14.0	913,575
1893	738,741	14,168,955	19.2	7,651,236	48,858	664,310	13.6	783,886
1892	774,732	14,494,430	18.7	8,551,714	33,249	535,931	16.1	529,500
1891	752,453	18,323,459	24.4	11,690,367	41,451	769,600	18.6	816,546
1890	781,206	15,389,313	19.7	9,279,756	39,456	761,341	19.3	978,323
1889	708,068	13,509,237	19.1	7,524,645	21,830	371,893	17.0	471,188
1888	696,653	14,269,863	20.5	9,332,490	22,700	534,526	23.5	607,756
1887	726,756	12,173,332	16.8	6,804,892	20,275	275,975	13.6	270,180
1886	703,936	16,043,734	22.8	8,439,004	21,072	482,072	22.9	403,494
1885	646,081	14,006,192	21.7	8,123,591	24,651	496,564	20.1	397,251
1884	570,928	13,691,607	24.0	8,817,395	24,878	592,044	23.8	698,612
1883	542,771	10,673,723	19.7	7,578,343	25,907	.....	.....	.....
1882	560,770	11,006,115	19.6	8,144,525	19,787	409,910	20.7	807,523
Annual Averages:								
1922–1928	114,399	2,139,977	18.7	3,124,815	49,155	812,182	16.5	2,066,515
1912–1921	134,576	2,203,352	16.4	3,797,312	58,729	806,805	13.7	2,866,760
1902–1911	389,104	7,056,642	18.1	5,275,196	50,006	854,999	17.1	1,263,012
1892–1901	769,819	14,242,404	18.5	7,613,480	51,654	875,597	17.0	818,381
1882–1891	668,962	13,908,658	20.8	8,573,501	26,201	469,393	17.9	545,087
1882–1928	434,583	8,278,519	19.0	5,839,757	47,021	760,707	16.2	1,476,553

STATISTICS OF FARM CROPS

Rye and Buckwheat

The following table gives the area, produce and market value of Rye and Buckwheat for the years 1882 to 1928, together with the annual average for the various periods of ten years and the average for the forty-seven years.

Years	Rye				Buckwheat			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	66,307	1,131,172	17.1	1,076,724	271,243	5,692,376	21.0	4,638,578
1927	72,323	1,289,058	17.8	1,228,421	249,210	5,892,510	23.6	4,593,204
1926	86,355	1,501,390	17.4	1,309,840	234,870	4,975,192	21.2	3,830,695
1925	98,652	1,784,625	18.1	1,553,529	257,932	5,579,109	21.6	4,086,236
1924	126,641	2,299,545	18.2	2,471,369	240,552	6,449,496	26.8	5,593,465
1923	123,354	2,011,325	16.3	1,481,691	230,276	5,012,010	21.8	3,670,511
1922	152,709	2,500,354	16.4	1,959,112	197,812	4,266,215	21.6	3,137,448
1921	122,868	1,775,599	14.5	1,467,086	147,944	3,354,201	22.7	2,482,999
1920	133,090	2,349,880	17.7	3,336,240	143,204	3,190,478	22.3	3,367,161
1919	140,072	2,219,042	15.8	3,531,031	178,569	4,071,959	22.8	5,727,413
1918	112,726	1,812,909	16.1	2,750,561	223,662	4,597,990	20.6	6,207,986
1917	133,077	2,222,325	16.7	3,614,591	153,457	2,992,391	19.5	4,278,256
1916	148,738	2,354,410	15.8	2,797,290	229,205	3,261,888	14.2	3,555,699
1915	173,736	3,210,512	18.5	2,532,051	193,497	4,278,366	22.1	3,057,398
1914	138,913	2,315,532	16.7	1,965,522	177,227	4,251,421	24.0	3,041,564
1913	118,429	1,979,775	16.7	1,310,306	228,279	4,012,418	17.6	2,549,398
1912	105,949	1,839,675	17.4	1,287,208	205,893	5,414,796	26.3	2,950,001
1911	98,652	1,562,971	15.8	1,326,510	189,039	3,852,231	20.4	2,324,992
1910	95,397	1,620,333	17.0	1,024,787	194,913	4,693,881	24.1	2,346,387
1909	94,661	1,573,921	16.6	1,060,566	176,630	4,280,790	24.2	2,284,440
1908	87,908	1,453,616	16.5	1,012,953	140,605	3,323,668	23.6	1,799,890
1907	67,158	1,039,021	15.5	721,081	113,039	2,546,468	22.5	1,461,673
1906	79,870	1,327,582	16.6	808,497	106,444	1,792,903	16.8	887,487
1905	101,292	1,714,951	16.9	974,092	101,591	2,199,652	21.7	1,099,826
1904	130,702	2,001,826	15.3	1,153,052	100,608	2,066,234	20.5	1,004,190
1903	179,277	2,970,768	16.6	1,443,793	95,487	2,049,169	21.5	907,782
1902	189,318	3,509,332	18.5	1,772,213	93,324	1,911,683	20.5	917,608
1901	158,236	2,545,268	16.1	1,254,817	88,266	1,757,071	19.9	850,422
1900	142,213	2,357,635	16.6	1,143,453	102,570	1,874,261	18.3	819,052
1899	137,824	2,284,846	16.6	1,142,423	132,082	2,203,299	16.7	1,002,501
1898	165,089	2,673,234	16.2	1,162,857	150,394	2,373,645	15.8	906,732
1897	187,785	3,382,005	18.0	1,275,016	151,669	3,464,186	22.8	1,039,256
1896	148,680	2,230,873	15.0	816,500	145,606	2,603,669	17.9	794,119
1895	120,350	1,900,117	15.8	866,453	135,262	2,791,749	20.6	1,027,364
1894	90,144	1,386,606	15.4	612,880	145,268	2,534,335	17.4	993,459
1893	68,486	994,771	14.5	472,516	133,828	2,380,456	17.8	995,031
1892	73,073	1,132,504	15.5	631,937	125,104	2,521,214	20.2	1,063,952
1891	67,865	1,134,630	16.7	820,337	107,879	2,608,142	24.2	1,150,191
1890	103,061	1,563,345	15.2	823,883	90,111	2,053,720	22.8	883,100
1889	90,106	1,431,679	15.9	728,725	56,398	1,272,578	22.6	502,668
1888	84,087	1,295,302	15.4	779,772	57,528	1,222,283	21.2	602,585
1887	68,362	894,887	13.1	442,969	64,143	1,025,353	16.0	461,409
1886	67,779	1,106,462	16.3	577,573	70,792	1,678,708	23.7	565,725
1885	78,293	1,271,506	16.2	701,871	61,776	1,530,675	24.8	600,024
1884	103,416	1,648,259	15.9	984,010	65,836	1,484,570	22.5	593,828
1883	188,111	3,012,240	16.0	2,018,201	67,802	.....	.....	.....
1882	185,276	3,473,799	18.7	2,223,231	50,035	1,262,973	25.2	505,189
Annual Averages:								
1922–1928	103,763	1,788,210	17.2	1,582,955	240,271	5,409,558	22.5	4,221,448
1912–1921	132,760	2,207,966	16.6	2,459,189	188,094	3,942,591	21.0	3,721,788
1902–1911	112,424	1,877,432	16.7	1,129,754	131,168	2,871,668	21.9	1,503,428
1892–1901	129,188	2,088,786	16.2	937,885	131,005	2,450,389	18.7	949,189
1882–1891	103,636	1,683,211	16.2	1,010,057	69,230	1,413,900	20.4	586,472
1882–1928	117,158	1,938,115	16.5	1,413,820	146,316	3,077,710	21.0	2,067,211

STATISTICS OF FARM CROPS

Flax and Mixed Grains.

The following table gives the area, produce and market value of Flax and Mixed Grains for the years 1907 to 1928, together with the average for the various periods and for the whole term of years.

Years	Flax				Mixed Grains			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	7,964	67,441	8.5	141,111	905,693	33,691,418	37.2	23,420,648
1927	7,080	68,173	9.6	121,004	799,333	31,918,944	39.9	22,882,169
1926	7,712	75,736	9.8	148,149	770,981	28,577,629	37.1	18,697,998
1925	9,789	123,134	12.6	262,386	681,624	28,246,057	41.4	16,559,729
1924	6,619	77,801	11.8	162,590	645,622	26,403,332	40.9	18,231,508
1923	6,760	68,684	10.2	140,376	648,934	23,880,889	36.8	14,290,315
1922	4,556	48,662	10.7	106,046	552,399	21,270,479	38.5	11,882,085
1921	7,534	66,748	8.9	130,995	618,289	16,188,510	26.2	10,579,352
1920	21,053	224,893	10.7	515,983	581,689	25,712,447	44.2	20,556,442
1919	13,717	129,461	9.4	670,608	628,761	19,735,287	31.4	26,403,773
1918	15,925	196,221	12.3	*1,224,783	619,389	27,462,374	44.3	28,253,556
1917	7,372	.....	....	.....	515,593	20,102,421	39.0	20,876,501
1916	5,880	.....	....	.....	485,986	13,297,354	27.4	12,485,065
1915	5,334	.....	....	.....	475,738	19,461,609	40.9	10,602,271
1914	6,025	.....	....	.....	456,631	16,854,550	36.9	10,074,687
1913	7,431	.....	....	.....	414,517	15,113,480	36.5	7,953,111
1912	9,125	.....	....	.....	448,402	16,382,161	36.5	8,674,724
1911	12,128	.....	....	.....	486,112	14,845,595	30.5	9,104,141
1910	12,021	.....	....	.....	497,936	18,261,803	36.7	9,187,822
1909	11,253	.....	....	.....	474,530	16,199,434	34.1	8,825,196
1908	8,562	.....	....	.....	456,049	15,354,350	33.7	8,444,893
1907	9,296	.....	....	.....	443,100	14,202,511	32.1	7,811,381
Annual Averages:								
1922–1928	7,212	75,662	10.5	154,523	714,941	27,726,964	38.8	17,994,922
1912–1921	9,940	.....	....	.....	524,500	19,031,019	36.3	15,645,948
1907–1911	10,652	.....	....	.....	471,545	15,772,739	33.4	8,674,687
1907–1928	9,234	.....	....	.....	573,059	21,052,847	36.7	14,808,971

*Including seed of fibre variety commandeered and shipped to Ireland to the value of $930,769. No estimates of yields of flax were made previous to 1918. The average for the eleven years, 1918–1928, was 9,883 acres, yielding 104,269 bushels, valued at $329,457.

Tobacco.

The following table gives the estimated area and production of Tobacco for the years 1922 to 1928, together with the annual average for this period. Like all special crops, these figures are useful only for comparative purposes.

Years	Acres	Pounds	Per acre
1928	33,977	35,585,848	1,047
1927	34,555	39,520,986	1,144
1926	19,992	25,557,724	1,278
1925	12,719	15,315,935	1,204
1924	12,399	14,525,471	1,172
1923	8,630	10,797,228	1,251
1922	9,189	10,031,870	1,202
Annual averages:			
1922–1928	18,780	21,762,152	1,159

STATISTICS OF FARM CROPS

Husking Corn and Silo Corn

The following table gives the area, produce and market value of *Corn (for husking and for silo) for the years 1892 to 1928, together with the annual averages for the various periods of ten years and the average for the thirty-seven years.

Years	Corn for Husking				Corn for Silo			
	Acres	Bushels (in the ear)	Per acre	Market value	Acres	Tons, green	Per acre	Market value
				$				$
1928	110,192	6,921,850	62.8	4,714,511	299,307	2,685,727	8.97	11,199,482
1927	102,626	5,449,213	53.1	3,613,287	326,964	2,490,660	7.62	10,012,453
1926	179,325	10,329,439	57.6	5,529,069	367,772	3,497,071	9.51	15,736,820
1925	207,767	14,604,467	70.3	8,131,617	373,133	3,614,233	9.69	15,360,490
1924	263,615	16,711,996	63.4	11,737,059	403,060	3,977,017	9.87	17,896,577
1923	285,335	19,292,244	67.6	9,710,461	409,628	3,651,102	8.91	14,604,408
1922	265,018	18,459,363	69.7	8,609,503	438,819	4,413,191	10.06	17,652,764
1921	250,684	20,313,661	81.0	8,012,455	438,343	5,015,082	11.44	25,075,410
1920	243,909	19,372,277	79.4	12,867,119	449,176	4,668,054	10.39	23,340,270
1919	221,004	15,152,475	68.6	16,400,838	399,549	4,013,946	10.05	20,069,730
1918	195,310	13,015,072	66.6	13,650,415	380,946	3,944,313	10.35	17,749,409
1917	258,935	11,513,512	44.5	14,278,407	511,329	4,587,176	8.97	18,348,704
1916	258,332	12,717,072	49.2	9,446,060	439,411	3,276,185	7.46	10,647,610
1915	309,773	21,760,496	70.2	9,885,292	443,736	4,874,377	10.98	12,185,943
1914	290,817	23,232,360	80.0	10,622,455	418,105	4,751,223	11.36	11,878,058
1913	299,871	22,214,014	74.1	9,545,538	388,138	4,059,345	10.46	10,148,363
1912	301,251	21,969,468	72.9	8,162,565	377,982	3,969,597	10.50	9,923,993
1911	308,350	21,913,290	71.7	9,693,994	335,935	3,764,227	11.21	9,410,568
1910	320,519	24,900,386	77.7	9,301,245	326,627	3,788,364	11.60	7,576,728
1909	322,789	22,619,690	70.1	9,705,826	288,346	3,374,655	11.70	6,749,310
1908	299,690	23,601,122	78.8	9,440,336	233,753	2,729,265	11.68	5,458,530
1907	338,573	21,899,466	64.7	6,219,448	200,354	2,029,547	10.13	4,059,094
1906	289,456	23,988,682	82.9	9,019,744	180,796	2,149,413	11.89	4,298,826
1905	295,005	20,922,919	70.9	7,720,557	184,784	2,284,812	12.36	4,569,624
1904	329,882	20,241,914	61.4	7,570,476	193,115	2,023,340	10.48	4,046,680
1903	378,924	29,287,888	77.3	10,807,230	209,727	2,564,400	12.23	5,128,800
1902	371,959	20,512,194	55.1	8,327,951	209,859	2,611,334	12.44	5,222,668
1901	323,923	24,838,105	76.7	9,438,480	197,932	2,359,514	11.92	4,719,028
1900	330,772	27,093,561	81.9	8,588,659	179,798	2,147,532	11.94	4,295,064
1899	333,590	21,673,234	65.0	4,291,300	171,935	1,697,755	9.87	3,395,510
1898	330,748	23,442,593	70.9	4,711,961	189,948	2,128,073	11.20	4,256,146
1897	335,030	24,663,998	73.6	4,858,808	209,005	2,669,822	12.77	5,339,644
1896	317,667	24,071,364	75.8	4,717,987	178,962	1,948,780	10.89	3,897,560
1895	302,929	24,819,899	81.9	5,609,297	149,899	1,775,654	11.85	3,551,308
1894	267,348	16,275,352	60.9	4,247,867	111,361	1,049,765	9.43	2,099,530
1893	217,294	14,072,961	64.8	3,729,335	95,865	1,049,524	10.95	2,099,048
1892	181,463	11,229,498	61.9	2,953,358	91,403	948,907	10.38	1,897,814
Annual Averages:								
1922–1928	201,983	13,109,796	64.9	7,435,072	374,098	3,475,572	9.29	14,637,571
1912–1921	262,989	18,126,041	68.9	11,287,114	424,672	4,315,930	10.16	15,936,749
1902–1911	325,515	22,988,755	70.6	8,780,681	236,330	2,731,936	11.56	5,652,083
1892–1901	294,076	21,218,057	72.2	5,314,705	157,611	1,777,533	11.28	3,555,065
1892–1928	276,748	19,326,948	69.8	8,266,771	292,022	3,042,783	10.42	9,564,918

*The combined average area for corn for the ten years 1882–1891 was 195,878 acres, the average value of the produce for the same period being $3,704,614. The combined average for corn for the forty-seven years, 1882–1928, is 489,431 acres, the average value of the produce for the same period being $14,825,928.

STATISTICS OF FARM CROPS

Potatoes and Turnips

The following table gives the area, produce and market value of Potatoes and Turnips for the years 1882 to 1928, together with the annual averages for the various periods of ten years and the average for the forty-seven years.

Years	Potatoes				Turnips			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	181,241	19,791,851	109.2	11,052,928	71,791	34,323,412	478	6,864,682
1927	159,871	15,495,307	96.9	13,662,224	68,479	29,452,281	430	5,448,672
1926	153,468	16,496,290	107.5	18,627,771	71,500	23,204,013	325	4,640,803
1925	163,790	15,714,786	95.9	21,513,125	73,318	28,015,466	382	5,042,784
1924	169,145	24,966,530	147.6	13,355,441	70,110	32,547,607	464	5,533,093
1923	164,682	19,131,980	116.2	14,306,447	65,193	27,099,910	416	5,419,982
1922	172,858	20,349,541	117.7	10,385,525	67,635	29,923,528	442	5,984,706
1921	164,096	15,400,142	93.8	13,589,599	70,715	24,265,547	343	6,673,025
1920	157,509	23,961,709	152.1	23,776,530	80,588	40,141,406	498	11,038,887
1919	157,286	15,144,921	96.3	25,026,467	85,312	28,740,526	337	7,903,645
1918	166,203	19,375,947	116.6	19,238,431	85,449	42,190,382	494	10,547,596
1917	146,481	18,291,735	124.9	22,530,291	93,034	39,989,556	430	7,997,911
1916	139,523	7,408,429	53.1	9,684,215	91,670	24,067,699	263	3,369,478
1915	173,934	13,267,023	76.3	10,805,026	97,451	46,598,851	478	4,659,885
1914	167,591	26,717,587	159.4	11,747,332	95,371	46,336,708	486	4,633,671
1913	159,661	19,024,115	119.2	12,114,656	97,572	41,889,894	429	4,188,989
1912	158,888	21,346,394	134.3	13,604,052	101,529	49,561,566	488	4,956,157
1911	162,457	13,918,698	85.7	11,722,539	100,593	39,664,275	394	3,966,428
1910	168,454	21,927,804	130.2	10,798,597	108,360	49,425,472	456	4,942,547
1909	169,695	24,645,283	145.2	8,989,452	113,400	50,738,940	447	5,073,894
1908	166,974	18,517,642	110.9	8,874,201	120,920	41,210,189	341	4,121,019
1907	177,186	20,057,675	113.2	11,693,625	123,011	48,205,605	392	4,820,561
1906	136,064	15,020,299	110.4	8,080,921	132,512	57,060,151	431	5,706,015
1905	132,530	14,366,049	108.4	6,608,383	135,348	57,654,086	426	5,765,409
1904	133,819	15,479,122	115.7	7,847,915	133,207	64,861,703	487	6,486,170
1903	139,011	16,676,447	120.0	7,354,313	134,469	69,316,341	515	6,931,634
1902	144,733	12,942,502	89.4	7,312,514	136,725	71,740,204	525	7,174,020
1901	154,155	18,116,637	117.5	7,717,687	145,909	68,287,467	468	6,828,747
1900	163,754	21,476,439	131.2	5,605,351	156,583	59,330,395	379	5,933,040
1899	168,148	19,933,366	118.5	6,538,144	153,440	58,078,390	379	5,807,839
1898	169,946	14,358,625	84.5	6,332,154	151,601	64,727,882	427	6,472,788
1897	169,333	16,100,797	95.1	6,424,218	149,336	68,297,148	457	6,829,715
1896	178,965	21,305,477	119.0	5,582,035	148,234	69,814,841	471	6,981,484
1895	184,647	29,390,884	159.2	5,936,959	151,806	63,496,702	418	6,349,670
1894	167,253	17,153,130	102.6	6,075,748	147,657	61,694,487	418	6,169,449
1893	142,601	12,911,212	90.5	5,099,929	136,604	56,975,355	417	5,697,535
1892	145,703	12,289,817	84.3	6,194,068	129,627	63,541,641	490	6,354,164
1891	160,218	24,055,886	150.1	7,842,219	126,075	68,853,452	546	6,885,345
1890	158,094	17,561,117	111.1	7,779,575	111,055	47,040,563	424	4,704,056
1889	145,812	14,355,529	98.5	6,531,766	111,103	37,021,260	333	3,702,126
1888	153,915	22,273,607	144.7	7,060,733	113,188	47,640,237	421	4,764,024
1887	140,283	10,678,000	76.1	6,705,784	105,322	31,413,456	298	3,141,346
1886	140,143	16,012,358	114.3	7,189,548	98,931	47,061,053	476	4,706,105
1885	159,741	21,091,144	132.0	8,668,460	102,303	41,137,735	402	4,113,774
1884	168,757	27,546,261	163.2	11,018,504	104,199	44,406,363	426	4,440,636
1883	166,823	16,400,782	98.3	10,168,485	98,429	29,879,354	304	2,987,935
1882	160,700	18,432,145	114.7	11,796,573	78,823	35,359,331	448	3,535,933
Annual Averages:								
1922–1928	166,436	18,849,469	113.3	14,700,494	69,718	29,223,745	419	5,562,103
1912–1921	159,117	17,993,800	113.1	16,211,660	89,869	38,378,214	427	6,596,924
1902–1911	153,092	17,355,152	113.4	8,928,246	123,855	54,987,697	444	5,498,770
1892–1901	164,451	18,304,638	111.3	6,150,629	147,080	63,424,431	431	6,342,443
1882–1891	155,449	18,840,683	121.2	8,476,165	104,943	42,981,280	410	4,298,128
1882–1928	159,280	18,231,681	114 5	10,650.435	109.478	46,857,073	428	5,665,902

STATISTICS OF FARM CROPS

Mangels and Sugar Beets

The following table gives the area, produce and market value of Mangels for the years 1882 to 1928, and of Sugar Beets for the years 1907 to 1928, together with the annual average for the various periods of ten years and the average for the full period.

Years	Mangels				Sugar Beets			
	Acres	Bushels	Per acre	Market value	Acres	Bushels	Per acre	Market value
				$				$
1928	33,567	14,738,443	439	2,947,689	45,294	15,215,990	336	2,757,898
1927	34,665	13,494,700	389	2,496,520	38,503	13,453,691	349	2,606,653
1926	34,009	13,548,484	398	2,709,697	41,594	18,831,084	453	3,766,217
1925	35,385	14,881,069	421	2,678,592	37,718	16,686,713	442	3,003,608
1924	35,958	15,616,128	434	2,654,742	36,080	13,346,456	370	2,272,570
1923	35,118	14,865,791	423	2,973,158	22,450	8,647,615	385	1,729,523
1922	35,274	16,366,353	464	3,273,271	20,725	7,616,281	367	1,523,246
1921	31,225	11,909,854	381	3,275,210	28,367	10,712,975	378	2,946,068
1920	36,450	17,174,290	471	4,722,930	36,288	16,497,067	455	4,536,693
1919	35,010	13,409,270	383	3,687,549	24,500	9,586,495	391	2,636,286
1918	40,714	18,244,453	448	4,561,113	22,894	9,398,141	411	2,349,535
1917	49,148	19,492,626	397	3,898,525	22,039	6,781,113	308	1,356,223
1916	42,793	9,756,015	228	1,365,842	22,482	6,023,938	268	843,351
1915	50,799	25,356,323	498	2,028,506	22,890	8,644,281	378	1,080,535
1914	50,663	25,439,520	502	2,035,162	18,534	7,466,819	403	933,352
1913	54,568	21,935,847	402	1,754,868	19,083	6,389,177	335	798,647
1912	60,103	27,671,114	460	2,213,689	21,054	7,819,066	371	977,383
1911	64,855	28,126,313	434	2,250,105	24,664	8,941,659	363	1,117,707
1910	68,966	34,686,137	503	2,774,891	26,879	11,238,577	418	1,348,629
1909	70,488	28,928,347	410	2,314,267	19,812	7,001,565	353	840,188
1908	67,937	29,870,966	440	2,389,677	17,453	7,004,748	401	840,570
1907	68,644	30,260,315	441	2,420,825	16,851	8,237,044	489	988,445
1906	69,352	32,863,192	474	2,629,055				
1905	69,035	33,216,930	481	2,657,354				
1904	71,344	33,595,440	471	2,687,635				
1903	80,918	41,768,239	516	3,341,459				
1902	76,553	39,140,924	511	3,131,274				
1901	61,095	29,683,324	486	2,374,666				
1900	54,543	24,728,525	453	1,978,282				
1899	53,401	20,898,387	391	1,671,871				
1898	47,923	21,957,564	458	1,756,605				
1897	41,175	18,103,387	440	1,448,271				
1896	36,101	16,849,401	467	1,347,952				
1895	34,383	15,961,502	464	1,276,920				
1894	27,670	11,532,127	417	922,570				
1893	21,519	8,582,568	399	686,605				
1892	22,026	10,350,474	470	828,038				
1891	22,961	11,779,448	513	942,356				
1890	25,953	11,594,518	447	927,561				
1889	21,211	7,223,478	341	577,878				
1888	21,459	10,020,659	467	801,653				
1887	17,924	5,695,761	318	455,661				
1886	18,170	8,787,743	484	703,019				
1885	16,435	7,660,729	466	612,858				
1884	18,341	8,655,184	472	692,415				
1883	17,219	6,252,015	363	500,161				
1882	15,792	7,711,420	488	616,913				
Annual Averages:								
1922–1928	34,854	14,787,281	424	2,819,096	34,623	13,399,690	387	2,522,816
1912–1921	45,147	19,038,931	422	2,954,339	23,813	8,931,907	375	1,845,807
1902–1911	70,809	33,245,680	470	2,659,654	*21,132	*8,484,719	*402	*1,027,108
1892–1901	39,984	17,864,726	447	1,429,178				
1882–1891	19,546	8,538,096	437	683,048				
1882–1928	42,529	18,944,368	445	2,063,742	†26,643	†10,251,841	†385	†1,875,151

*1907–11. †1907-28.

STATISTICS OF FARM CROPS

Alfalfa and Hay and Clover

The following table gives the area, produce and market value of Alfalfa for the years 1912 to 1928 and of Hay and Clover for the years 1882 to 1928, together with the annual average for the various periods of ten years and the average for the whole period.

Years	Alfalfa				Hay and Clover			
	Acres	Tons	Per acre	Market value	Acres	Tons	Per acre	Market value
				$				$
1928	743,230	1,730,135	2.33	20,020,248	†2,811,076	4,455,615	1.59	50,026,378
1927	806,397	1,865,868	2.31	21,915,225	†2,832,813	4,914,515	1.73	54,161,232
1926	748,473	1,850,392	2.47	25,889,781	†2,889,143	4,248,048	1.47	54,154,454
1925	550,645	1,397,462	2.54	19,306,047	†3,022,507	4,181,206	1.38	50,738,655
1924	381,258	1,067,717	2.80	12,252,536	3,545,856	5,615,238	1.58	61,283,373
1923	299,610	788,431	2.63	8,915,438	3,596,484	5,799,422	1.61	64,069,155
1922	221,326	629,135	2.84	7,439,403	3,575,662	5,568,459	1.56	66,964,036
1921	177,205	456,378	2.58	8,023,795	3,551,655	3,954,166	1.11	76,193,216
1920	162,820	399,581	2.45	10,172,434	3,533,740	4,459,094	1.26	109,036,159
1919	146,790	314,419	2.14	7,293,462	3,508,266	5,588,804	1.59	126,750,915
1918	144,010	328,971	2.28	6,579,420	3,470,036	4,596,854	1.32	83,344,591
1917	189,109	462,956	2.45	5,460,205	3,358,579	6,156,340	1.83	72,705,998
1916	177,565	460,788	2.60	4,822,622	3,294,419	6,739,259	2.05	71,503,879
1915	165,284	428,739	2.59	6,044,599	3,066,468	3,825,024	1.25	55,660,170
1914	163,685	372,759	2.28	5,195,667	3,251,799	3,469,795	1.07	50,721,713
1913	167,707	380,606	2.27	5,090,267	3,261,139	3,543,957	1.09	46,212,298
1912	189,959	460,201	2.42	5,542,772	3,177,410	4,760,512	1.50	55,906,657
1911	.....	.....	....	.....	3,301,468	4,238,362	1.28	55,767,671
1910	.....	.....	....	.....	3,204,021	5,492,653	1.71	54,407,105
1909	.....	.....	....	.....	3,228,445	3,885,145	1.20	49,754,078
1908	.....	.....	....	.....	3,253,141	4,635,287	1.42	47,696,579
1907	.....	.....	....	.....	3,289,552	3,891,863	1.18	58,806,050
1906	.....	.....	....	.....	3,069,917	4,684,625	1.53	42,630,087
1905	.....	.....	....	.....	3,020,365	5,847,494	1.94	45,142,654
1904	.....	.....	....	.....	2,926,207	5,259,189	1.80	41,915,736
1903	.....	.....	....	.....	2,783,565	4,336,562	1.56	34,432,302
1902	.....	.....	....	.....	2,646,202	4,955,438	1.87	40,386,820
1901	.....	.....	....	.....	2,557,263	4,632,317	1.81	37,012,213
1900	.....	.....	....	.....	2,526,566	3,133,045	1.24	26,568,222
1899	.....	.....	....	.....	2,505,422	3,498,705	1.40	27,010,003
1898	.....	.....	....	.....	2,453,503	4,399,063	1.79	27,362,172
1897	.....	.....	....	.....	2,341,488	3,811,518	1.63	27,366,699
1896	.....	.....	....	.....	2,426,711	2,260,240	.93	21,879,123
1895	.....	.....	....	.....	2,537,674	1,849,914	.73	22,753,942
1894	.....	.....	....	.....	2,576,943	3,575,200	1.39	27,028,512
1893	.....	.....	....	.....	2,766,894	4,963,557	1.79	37,921,575
1892	.....	.....	....	.....	2,515,367	4,384,838	1.74	35,955,672
1891	.....	.....	....	.....	2,549,975	2,392,798	.94	28,498,224
1890	.....	.....	....	.....	2,462,002	4,305,915	1.75	34,232,024
1889	.....	.....	....	.....	2,386,223	3,728,313	1.56	37,208,564
1888	.....	.....	....	.....	2,292,638	2,009,017	.88	33,570,674
1887	.....	.....	....	.....	2,280,643	3,093,610	1.36	35,947,748
1886	.....	.....	....	.....	2,295,151	2,994,446	1.35	29,016,182
1885	.....	.....	....	.....	2,268,091	3,252,155	1.43	32,033,727
1884	.....	.....	....	.....	2,193,369	3,044,912	1.39	29,109,359
1883	.....	.....	....	.....	2,350,969	4,115,535	1.75	37,122,126
1882	.....	.....	....	.....	1,825,890	2,090,626	1.14	24,125,824
Annual Averages								
1922–1928	535,848	1,332,734	2.49	16,534,097	3,256,434	5,119,213	1.57	58,771,026
1912–1921	168,413	406,540	2.41	6,422,524	3,347,351	4,709,381	1.41	74,803,560
1902–1911	.....	.....	....	.....	*3,072,288	4,722,662	1.54	47,093,908
1892–1901	.....	.....	....	.....	*2,520,783	3,650,840	1.45	29,085,813
1882–1891	.....	.....	....	.....	*2,290,495	3,102,733	1.35	32,086,445
1882–1928	.....	.....	....	.....	2,863,462	4,183,801	1.46	47,491,373

*Including Alfalfa. †Exclusive of Alsike and Sweet Clover, previously included.

STATISTICS OF FARM CROPS

Carrots and all Field Crops

The following table gives the area, produce and market value of Carrots and of all Field Crops for the years 1882 to 1928, together with the annual average for the various periods of ten years and the average for the whole period.

Years	Carrots				All Field Crops		
	Acres	Bushels	Per acre	Market value	Acres	Value	Per acre
				$		$	$ c.
1928	2,002	317,998	159	63,600	10,357,960	244,445,136	23.60
1927	1,743	286,863	165	53,070	10,305,045	256,627,042	24.90
1926	1,672	253,966	152	50,793	10,434,401	257,686,886	24.70
1925	1,835	325,478	177	58,586	10,364,317	261,490,292	25.23
1924	2,128	402,446	189	68,416	10,264,614	264,370,642	25.76
1923	1,780	285,270	160	57,054	10,296,961	219,114,500	21.28
1922	2,124	472,643	223	94,529	10,258,613	223,342,150	21.77
1921	2,217	410,501	185	112,888	10,075,073	222,177,881	22.05
1920	2,706	674,101	249	185,378	10,108,272	367,608,619	36.37
1919	2,706	605,803	224	166,596	9,915,884	397,238,400	40.06
1918	2,706	689,557	255	172,389	9,992,825	363,909,778	36.42
1917	2,920	758,292	260	151,658	9,718,259	333,353,438	34.30
1916	2,391	331,124	138	46,357	9,548,876	223,748,948	23.43
1915	2,439	686,232	281	85,779	9,762,951	210,674,415	21.58
1914	2,448	766,170	313	95,771	9,621,444	199,152,945	20.70
1913	2,400	592,016	247	74,002	9,541,537	168,455,253	17.65
1912	2,742	747,207	273	93,401	9,574,474	185,790,341	19.40
1911	3,207	815,129	254	101,891	9,718,741	179,974,358	18.52
1910	3,551	1,049,348	296	131,169	9,725,684	175,115,742	18.01
1909	3,506	1,001,653	286	125,207	9,578,323	167,966,577	17.54
1908	4,080	1,120,145	275	140,018	9,621,683	164,077,282	17.05
1907	4,530	1,585,500	350	198,187	9,750,615	176,354,759	18.09
1906	4,980	1,598,698	321	199,837	8,962,925	144,570,075	16.13
1905	5,509	1,846,659	335	230,832	8,897,898	142,804,431	16.05
1904	6,634	2,022,945	305	252,868	8,673,525	134,304,690	15.48
1903	7,805	2,612,778	335	326,597	8,731,405	136,657,807	15.65
1902	8,625	3,227,161	374	403,395	8,677,988	146,421,171	16.87
1901	9,221	3,199,967	347	399,996	8,667,512	128,325,648	14.81
1900	10,320	3,469,123	336	433,640	8,794,953	114,758,761	13.05
1899	11,891	3,674,035	309	459,254	8,753,926	105,771,321	12.08
1898	12,418	4,313,861	347	539,233	8,835,272	110,528,947	12.51
1897	12,025	4,433,628	369	554,204	8,701,705	106,952,471	12.29
1896	12,333	4,618,441	374	577,305	8,511,444	88,900,135	10.44
1895	13,002	4,581,373	352	572,672	8,321,173	99,655,895	11.98
1894	11,186	3,716,140	332	464,518	8,227,153	94,055,392	11.43
1893	9,288	2,971,450	320	371,431	8,054,612	101,886,557	12.65
1892	9,941	3,827,361	385	478,420	8,080,206	110,562,493	13.68
1891	9,858	3,814,016	387	476,752	7,834,213	130,866,023	16.70
1890	11,977	4,210,542	352	526,318	7,912,297	114,382,305	14.46
1889	11,261	3,431,959	305	428,995	7,758,583	106,500,799	13.73
1888	11,524	3,898,584	338	487,323	7,616,350	124,244,503	16.31
1887	9,110	2,105,686	231	263,210	7,429,084	99,583,524	13.40
1886	9,267	3,478,751	375	434,844	7,403,281	104,001,865	14.05
1885	9,024	3,462,319	384	432,790	7,350,443	110,068,586	14.97
1884	10,987	4,197,200	382	524,650	7,203,958	120,615,798	16.74
1883	11,270	3,984,436	354	498,055	7,542,623	114,754,141	15.21
1882	9,955	4,009,975	403	501,247	7,125,223	136,939,533	19.22
Annual Averages:							
1922–1928	1,898	334,952	176	63,721	10,325,987	246,725,235	23.89
1912–1921	2,568	626,100	244	118,422	*9,785,960	*267,211,002	27.31
1902–1911	5,243	1,688,002	322	211,000	9,233,879	156,824,689	16.98
1892–1901	11,163	3,880,538	348	485,068	8,494,796	106,139,762	12.49
1882–1891	10,243	3,659,347	351	457,417	7,517,606	116,195,708	15.48
1882–1928	6,537	2,146,479	328	280,109	8,991,581	174,272,091	19.38

*Including Flax, 1918–1921.

No statistics of "mixed grains" were taken previous to 1907, when an acreage of 443,100 was estimated.

STATISTICS OF FARM CROPS

Ratios of Areas under Crop

The following table shows the number of acres under the various crops per 1,000 acres of cleared land for the years 1882 to 1928, together with the averages for the various periods of ten years and for the whole term of years.

Year	Fall Wheat	Spring Wheat	Barley	Oats	Peas	Beans	Rye	Buckwheat	Corn	Potatoes	*Roots	Hay and Clover	Mixed Grains
1928	45.8	7.2	40.6	175.5	7.3	3.4	4.4	17.9	27.0	12.0	10.1	185.5	59.8
1927	49.6	7.9	34.0	177.7	7.0	3.1	4.8	16.5	28.4	10.6	9.5	187.1	52.8
1926	53.4	7.6	29.7	187.3	6.5	3.4	5.7	15.5	36.2	10.2	9.8	191.1	51.0
1925	49.5	7.5	28.9	187.9	8.8	4.0	6.5	17.1	38.5	10.8	9.8	234.7	45.1
1924	47.9	6.7	29.1	191.7	8.7	3.5	8.4	15.9	44.2	11.2	9.6	235.1	42.8
1923	47.6	7.4	30.1	197.1	7.8	2.7	8.2	15.3	46.2	10.9	8.3	238.9	43.1
1922	54.2	8.3	28.9	202.1	7.0	2.7	10.2	13.2	46.9	11.5	8.4	238.1	36.8
1921	41.4	10.2	30.8	206.1	7.1	1.8	8.2	9.9	45.9	10.9	8.8	236.5	41.2
1920	51.0	17.9	32.4	192.5	7.3	1.5	8.9	9.6	46.3	10.5	10.4	247.1	38.9
1919	41.6	24.2	38.2	179.5	8.5	1.5	9.4	12.0	41.7	10.6	9.9	245.3	42.2
1918	24.5	23.8	44.6	197.6	7.7	6.8	7.6	15.1	38.9	11.2	10.3	244.2	41.9
1917	39.8	12.4	37.4	187.6	6.1	7.5	9.0	10.4	52.3	10.0	11.4	240.9	35.0
1916	47.9	9.8	35.9	183.0	6.5	3.7	10.1	15.6	47.5	9.5	10.8	236.2	33.1
1915	55.5	11.1	37.8	196.4	8.7	4.3	11.9	13.2	51.5	11.9	11.9	221.0	32.5
1914	47.0	8.1	39.7	190.2	12.2	3.5	9.5	12.1	48.6	11.5	11.5	234.0	31.3
1913	44.5	8.0	43.0	186.0	12.2	4.6	8.2	15.7	47.4	11.0	12.0	236.2	28.5
1912	52.6	8.5	44.8	180.1	15.3	4.8	7.4	14.3	47.0	11.0	12.8	233.1	31.0
1911	58.2	9.3	42.9	187.7	21.2	3.6	6.9	13.1	44.8	11.3	13.4	229.6	33.8
1910	51.9	9.0	43.7	192.5	28.2	3.5	6.6	13.6	45.2	11.8	14.5	223.7	34.8
1909	46.5	9.5	48.8	189.0	26.7	3.2	6.6	12.4	42.9	11.9	14.5	226.5	33.3
1908	48.1	10.1	51.9	196.3	28.1	3.3	6.2	9.9	37.7	11.8	14.9	230.2	32.3
1907	47.9	10.2	54.3	207.7	24.1	3.4	4.8	8.0	38.2	12.6	15.1	233.0	31.4
1906	55.8	12.2	53.6	192.6	29.1	3.6	5.7	7.5	33.3	9.7	14.7	217.6	.....
1905	57.2	13.6	55.5	191.5	26.9	3.6	7.3	7.3	34.4	9.5	15.1	216.8	.....
1904	43.8	16.3	55.9	192.2	24.6	3.7	9.5	7.3	37.9	9.7	15.3	211.9	.....
1903	48.8	18.2	52.0	193.4	29.9	3.9	13.1	7.0	43.2	10.2	16.4	204.0	.....
1902	55.2	22.3	48.8	184.3	39.2	4.0	13.9	6.9	42.9	10.7	16.3	195.0	.....
1901	67.8	26.6	47.4	179.3	44.9	4.0	11.8	6.6	38.8	11.5	16.1	190.3	.....
1900	80.4	28.3	43.4	180.4	49.8	3.3	10.7	7.7	38.4	12.3	16.7	190.0	.....
1899	80.1	30.4	37.4	180.3	56.7	3.1	10.5	10.1	38.6	12.8	16.6	191.1	.....
1898	80.7	30.0	33.8	182.9	66.6	3.4	12.7	11.5	40.1	13.1	16.4	188.8	.....
1897	73.9	25.2	35.1	189.3	69.8	3.9	14.6	11.8	42.3	13.2	15.7	182.2	.....
1896	69.2	20.2	36.5	191.4	65.5	5.4	11.7	11.5	39.2	14.1	15.4	191.5	.....
1895	59.8	18.0	38.5	191.0	64.4	5.8	9.7	10.9	36.4	14.9	16.0	204.2	.....
1894	63.4	18.7	39.6	190.6	63.9	4.8	7.3	11.8	30.8	13.6	15.2	209.6	.....
1893	75.5	29.4	38.6	159.9	61.0	4.0	5.6	11.0	25.9	11.8	13.9	228.4	.....
1892	80.6	54.3	41.7	155.3	64.6	2.8	6.1	10.4	22.8	12.2	13.4	209.8	.....
1891	72.0	43.3	46.9	156.0	63.8	3.5	5.7	9.1	20.4	13.6	13.4	216.1	.....
1890	61.8	51.6	60.2	161.5	67.0	3.4	8.8	7.7	19.2	13.6	12.7	211.2	.....
1889	71.6	34.7	76.3	167.6	61.7	1.9	7.9	4.9	16.3	12.7	12.5	208.0	.....
1888	73.2	32.5	79.2	163.6	61.6	2.0	7.4	5.1	19.7	13.6	12.9	202.8	.....
1887	80.8	43.6	69.1	151.5	65.4	1.9	6.2	5.8	14.7	12.6	11.9	205.3	.....
1886	81.0	52.8	67.3	148.3	64.4	1.9	6.2	6.5	14.3	12.8	11.5	209.8	.....
1885	80.6	73.6	55.1	142.2	59.5	2.3	7.2	5.7	15.5	14.7	11.7	208.9	.....
1884	80.5	67.2	65.2	138.0	53.2	2.3	9.6	6.7	16.3	15.7	12.4	204.3	.....
1883	104.1	55.6	71.8	134.6	51.5	2.5	17.8	6.4	20.3	15.8	12.0	223.1	.....
1882	116.8	57.7	83.4	136.4	55.1	1.9	18.2	4.9	20.3	15.8	10.3	179.5	.....
Annual average:													
1922–1928	49.7	7.5	31.6	188.5	7.6	3.3	6.9	15.9	38.2	11.0	9.3	215.7	47.4
1912–1921	44.5	13.4	38.4	189.9	9.1	4.0	9.0	12.9	46.6	10.8	11.0	237.5	35.6
1902–1911	51.3	13.0	50.7	192.8	27.7	3.6	8.0	9.4	40.1	10.9	15.8	219.0	†33.1
1892–1901	73.2	28.0	39.2	180.2	60.5	4.1	10.1	10.3	35.5	12.9	15.6	198.2	.....
1882–1891	81.6	50.9	67.2	150.4	60.5	2.4	9.4	6.2	17.7	14.0	12.2	207.1	.....
1882–1928	59.2	21.9	45.2	181.4	32.4	3.5	8.7	10.9	36.5	11.9	13.8	213.3	‡38.9

*Mangels, turnips, carrots and sugar beets. †1907–1911. ‡1907–1928.

STATISTICS OF FARM CROPS

Market Prices

The following table gives the average Market Prices of Agricultural products for the years 1882 to 1928, together with the averages for the various periods of ten years, and for the whole term of years.

Years	Fall Wheat per bush.	Spring Wheat per bush.	Oats per bush.	Barley per bush.	Peas per bush.	Beans per bush.	Rye per bush.	Buckwheat per bush.	Corn (in ear) per bush.	Hay per ton.	Potatoes per bush.
	cents	cents	cents	cents	cents	$ c.	cents	cents	cents	$ c.	cents
1928	122.0	119.2	55.5	74.2	152.8	3.83	95.2	81.5	68.1	11.23	55.8
1927	124.7	122.1	57.3	77.6	149.8	2.35	95.3	77.9	66.3	11.02	88.2
1926	125.1	125.1	51.8	68.0	150.6	2.34	87.2	77.0	53.5	12.75	112.9
1925	133.6	133.0	45.2	68.1	135.5	2.11	87.1	73.2	55.7	11.61	136.9
1924	133.9	137.0	54.2	82.2	151.1	2.29	107.5	86.7	70.2	10.91	53.5
1923	96.2	96.3	45.4	62.8	144.8	2.43	73.7	73.2	50.3	11.05	74.8
1922	104.6	105.1	43.5	61.3	140.3	2.54	78.4	73.5	46.6	12.03	51.0
1921	110.5	109.4	50.4	65.7	153.0	2.35	82.6	74.0	39.4	19.27	88.2
1920	193.4	183.8	58.2	93.8	193.3	2.88	142.0	105.5	66.4	24.25	99.2
1919	237.2	240.9	97.7	145.8	263.9	4.00	159.1	140.7	108.2	22.68	165.2
1918	210.9	208.6	75.0	103.6	217.7	4.49	151.7	135.0	104.9	18.13	99.3
1917	209.8	209.7	77.9	125.7	321.0	6.91	162.6	142.9	124.0	11.81	123.2
1916	161.3	162.2	66.0	101.9	210.5	5.46	118.8	109.0	74.3	10.60	130.1
1915	97.1	98.6	39.5	56.0	161.6	3.11	78.9	71.5	45.4	14.51	81.4
1914	109.1	107.9	49.5	64.3	136.6	2.14	84.9	71.5	45.7	14.55	44.0
1913	85.0	87.9	36.9	55.5	100.6	1.70	66.2	63.5	43.0	13.07	63.7
1912	91.7	90.0	38.6	58.7	110.3	1.93	70.0	54.5	37.2	11.77	63.7
1911	86.6	90.7	44.2	73.9	98.2	1.90	84.9	60.4	44.2	13.16	84.2
1910	86.6	89.6	35.0	52.0	80.7	1.55	63.2	50.0	37.3	9.91	49.2
1909	102.3	100.6	39.5	54.8	84.6	1.61	67.4	53.4	42.9	12.81	36.5
1908	89.2	90.8	40.3	52.4	82.7	1.48	69.7	54.2	40.0	10.25	47.9
1907	92.7	86.4	48.8	59.4	78.0	1.52	69.4	57.4	28.4	15.11	58.3
1906	70.7	68.9	34.0	45.0	70.6	1.39	60.9	49.5	37.6	9.10	53.8
1905	76.5	74.9	33.6	42.9	65.3	1.32	56.8	50.0	36.9	7.72	46.0
1904	98.7	94.2	32.3	43.7	63.0	1.22	57.6	48.6	37.4	7.97	50.7
1903	75.1	74.4	29.3	42.1	64.3	1.41	48.6	44.3	36.9	7.94	44.1
1902	70.7	69.6	34.8	45.1	71.0	1.35	50.5	48.0	40.6	8.15	56.5
1901	66.1	66.8	36.2	45.0	65.3	1.25	49.3	48.4	38.0	7.99	42.6
1900	66.4	67.5	26.5	38.9	57.1	1.00	48.5	43.7	31.7	8.48	26.1
1899	66.7	66.5	27.7	39.5	57.3	1.08	50.0	45.5	19.8	7.72	32.8
1898	69.4	69.2	25.8	38.0	52.2	.70	43.5	38.2	20.1	6.22	44.1
1897	78.2	78.6	22.6	27.0	42.1	.65	37.7	30.0	19.7	7.18	39.9
1896	71.0	70.6	20.0	31.6	44.0	.68	36.6	30.5	19.6	9.68	26.1
1895	69.3	69.8	29.1	40.4	54.8	.95	45.6	36.8	22.6	12.30	20.2
1894	55.0	55.5	30.8	40.5	53.6	1.10	44.2	39.2	26.1	7.56	35.4
1893	59.9	59.4	33.2	40.1	54.0	1.18	47.5	41.8	26.5	7.64	39.5
1892	70.7	67.8	30.8	41.3	59.0	.99	55.8	42.2	26.3	8.20	50.4
1891	95.1	92.9	36.5	49.1	63.8	1.06	72.3	44.1	31.1	11.91	32.6
1890	94.2	91.3	41.1	50.2	60.3	1.29	52.7	43.0	30.5	7.95	44.3
1889	88.4	88.1	30.5	44.0	55.7	1.27	50.9	39.5	25.9	9.98	45.5
1888	102.4	99.3	40.5	60.1	65.4	1.14	60.2	49.3	29.3	16.17	31.7
1887	78.4	78.0	34.6	56.7	55.9	.98	49.5	45.0	28.7	11.62	62.8
1886	73.6	72.5	32.0	51.3	52.6	.84	52.2	33.7	27.6	9.69	44.9
1885	81.5	80.6	31.5	55.2	58.0	.80	55.2	39.2	27.9	9.85	41.1
1884	80.5	81.4	33.1	53.6	64.4	1.18	59.7	40.0	45.0	9.56	40.0
1883	105.0	107.0	38.0	57.0	71.0	.....	62.0	.....	.....	9.02	62.0
1882	101.0	106.0	43.0	65.0	74.0	1.97	64.0	40.0	40.0	11.54	64.0
Annual Averages:											
1922–1928	121.3	120.1	50.2	71.1	146.0	2.54	88.5	78.0	56.7	11.48	78.0
1912–1921	144.5	171.6	58.5	86.0	172.3	2.35	111.4	94.4	62.3	15.88	90.1
1902–1911	83.6	81.2	36.7	50.1	74.8	1.48	60.2	52.4	38.2	9.97	51.4
1892–1901	67.8	67.5	27.9	38.5	53.5	.93	44.9	38.7	25.0	7.97	33.6
1882–1891	90.0	89.6	34.3	54.5	61.6	1.16	60.0	41.5	.....	10.34	45.0
1882–1928	98.9	98.2	42.7	59.5	70.5	1.94	72.9	67.2	*42.8	11.35	58.4

*Average for 37 years, 1892-1928.

STATISTICS OF LIVE STOCK

NUMBER OF LIVE STOCK ON HAND

The following tables give the number of horses, cattle, sheep, swine and poultry on hand in June of each year for the forty-seven years 1882-1928.

Years	Horses	Cattle	Sheep	Swine	Poultry
	No.	No.	No.	No.	No.
1928	609,249	2,682,053	1,014,106	1,833,538	19,703,576
1927	617,136	2,709,954	956,267	1,883,177	19,048,045
1926	629,659	2,757,799	886,483	1,735,355	17,693,000
1925	644,138	2,809,373	868,526	1,678,595	17,778,581
1924	663,875	2,917,302	870,279	1,807,903	16,751,345
1923	673,371	2,838,087	907,673	1,734,734	15,203,384
1922	685,852	2,836,181	986,617	1,553,434	13,964,317
1921	694,237	2,890,113	1,081,828	1,563,807	11,458,206
1920	704,640	2,881,827	1,129,084	1,614,356	11,005,645
1919	719,569	2,927,191	1,101,740	1,695,487	11,705,809
1918	732,977	2,867,722	972,341	1,656,386	12,281,105
1917	765,873	2,827,609	956,986	1,664,639	13,606,292
1916	775,732	2,734,767	908,066	1,735,254	14,377,844
1915	779,131	2,674,746	908,095	1,769,295	14,273,091
1914	774,544	2,604,628	922,375	1,770,533	14,175,214
1913	751,726	2,628,845	996,155	1,618,734	13,511,383
1912	742,139	2,624,780	1,021,848	1,702,652	13,024,983
1911	737,916	2,593,205	1,040,245	1,744,983	12,942,293
1910	724,384	2,567,128	1,065,101	1,561,042	12,460,787
1909	728,308	2,668,584	1,130,667	1,551,187	12,086,580
1908	726,471	2,824,859	1,143,898	1,818,763	12,285,613
1907	725,666	2,926,236	1,106,083	2,049,666	13,428,076
1906	688,147	2,963,618	1,304,809	1,819,778	10,254,824
1905	672,781	2,889,503	1,324,153	1,906,460	9,738,493
1904	655,554	2,776,304	1,455,482	2,008,984	9,412,683
1903	639,581	2,674,261	1,642,627	1,977,386	9,683,573
1902	626,106	2,562,584	1,715,513	1,684,635	9,762,808
1901	620,343	2,507,620	1,761,799	1,491,885	9,745,236
1900	617,309	2,429,330	1,797,213	1,771,641	9,541,241
1899	615,524	2,318,355	1,772,604	1,971,070	9,344,024
1898	611,241	2,215,943	1,677,014	1,640,787	9,084,273
1897	813,670	2,182,326	1,690,350	1,284,963	8,435,341
1896	624,749	2,181,958	1,849,348	1,269,631	7,734,167
1895	647,696	2,150,103	2,022,735	1,299,072	7,752,840
1894	674,777	2,099,301	2,015,805	1,142,133	7,552,662
1893	685,187	2,057,882	1,935,938	1,012,022	7,114,436
1892	688,814	2,029,140	1,850,473	996,974	7,078,973
1891	678,459	1,978,815	1,693,751	1,156,316	7,006,090
1890	659,636	1,894,712	1,339,695	1,140,559	6,854,864
1889	618,795	1,891,899	1,344,180	835,469	6,304,298
1888	596,218	1,928,638	1,349,044	819,079	6,164,114
1887	575,361	1,948,264	1,396,161	832,817	6,438,361
1886	569,649	2,018,173	1,610,949	860,1 5	6,968,915
1885	558,809	1,976,480	1,755,605	822,262	6,336,805
1884	535,953	1,925,670	1,890,733	916,158	6,237,606
1883	560,133	1,828,613	1,868,784	906,727	5,847,344
1882	503,604	1,586,312	1,915,303	850,226	5,352,120

VALUE OF LIVE STOCK ON HAND

The following table gives the value of horses, cattle, sheep, swine and poultry on hand in June of each year for the forty-seven years 1882-1928, except for the ten years 1882-1891 when farm live stock was valued in bulk.

Years	Horses	Cattle	Sheep	Swine	Poultry	Total
	$	$	$	$	$	$
1928	67,085,352	128,937,680	11,209,872	19,808,890	12,452,203	239,493,997
1927	66,724,527	117,162,152	10,433,761	24,159,535	12,333,645	231,145,720
1926	68,239,756	115,386,214	9,688,685	24,525,126	12,400,985	230,240,766
1925	69,787,791	115,844,069	9,576,722	24,424,238	13,527,454	233,160,274
1924	72,617,565	113,046,599	7,081,500	16,201,699	13,446,621	222,393,984
1923	74,542,351	109,467,066	6,597,087	19,018,668	12,401,083	222,026,255
1922	74,535,855	103,899,416	6,612,959	16,550,636	12,241,252	213,840,118
1921	75,680,750	103,861,565	8,207,564	19,205,488	11,168,318	218,123,685
1920	89,606,594	176,897,490	16,191,741	32,253,804	11,787,708	326,737,337
1919	92,823,683	184,041,594	18,128,240	33,263,051	11,351,364	339,607,932
1918	95,710,928	172,259,261	15,690,055	31,140,181	9,307,051	324,107,476
1917	99,439,558	150,309,828	9,946,030	21,464,366	8,517,195	289,676,977
1916	101,434,391	128,324,526	7,386,710	18,790,755	7,933,157	263,869,539
1915	107,982,037	115,363,336	6,403,907	17,562,726	7,670,326	254,982,332
1914	112,576,793	106,635,148	6,155,451	17,951,258	7,551,428	250,870,078
1913	113,240,047	95,759,022	6,242,672	15,393,192	6,956,952	237,591,885
1912	109,000,214	90,403,902	6,181,595	14,141,908	6,121,323	225,848,942
1911	103,373,206	84,634,962	6,213,021	14,593,917	5,905,318	214,720,424
1910	92,757,431	76,872,723	6,127,018	13,265,834	5,393,031	194,416,037
1909	87,682,689	75,247,197	6,262,493	11,144,135	4,411,386	184,747,900
1908	85,847,391	77,255,267	6,336,265	12,135,979	4,439,854	186,014,756
1907	85,041,144	79,485,780	5,928,325	14,174,502	4,854,381	189,484,132
1906	79,814,953	80,303,276	6,721,119	12,770,708	3,697,338	183,307,394
1905	73,911,177	76,764,482	6,191,774	12,280,667	3,335,660	172,483,760
1904	68,138,228	72,821,003	6,425,100	12,921,743	3,077,029	163,383,103
1903	61,811,456	69,289,924	7,228,498	13,023,743	2,973,646	154,327,267
1902	55,173,637	63,517,342	7,634,284	11,262,265	2,957,286	140,544,814
1901	50,038,465	59,527,119	7,772,793	9,298,712	2,859,172	129,496,261
1900	46,916,999	56,320,810	7,711,496	9,598,153	2,727,363	123,274,821
1899	42,713,557	52,938,500	7,315,729	10,180,338	2,658,321	115,806,445
1898	38,659,896	47,286,254	6,499,695	8,720,242	2,578,136	103,744,223
1897	36,111,805	42,683,557	6,003,194	6,533,210	2,318,038	93,649,804
1896	37,185,692	44,383,638	6,652,202	6,505,227	2,130,807	96,857,566
1895	40,283,754	46,708,017	7,708,442	7,101,211	2,156,623	103,958,047
1894	46,245,614	47,577,587	8,606,671	6,909,262	2,208,518	111,547,652
1893	50,527,472	47,718,025	9,016,118	6,622,129	2,187,158	116,070,902
1892	55,812,920	45,548,475	8,569,557	5,479,093	2,091,450	117,501,495
1891	.....	.....	.....	.....	.....	108,721,076
1890	.....	.....	.....	.....	.....	104,086,626
1889	.....	.....	.....	.....	.....	105,731,288
1888	.....	.....	.....	.....	.....	102,839,235
1887	.....	.....	.....	.....	.....	104,406,655
1886	.....	.....	.....	.....	.....	107,208,935
1885	.....	.....	.....	.....	.....	100,690,086
1884	.....	.....	.....	.....	.....	103,106,829
1883	.....	.....	.....	.....	.....	100,082,365
1882	.....	.....	.....	.....	.....	80,540,720

The values for several classes of horses on hand June 15th, 1928, were as follows:—Stallions, $1,094,323; mares, $36,006,032; geldings, $26,793,951; colts and fillies, $3,191,046.

The values for the several classes of cattle on hand were as follows:—Bulls, $4,323,751; cows for milk purposes, $86,185,574; cows for beef purposes, $4,382,818; yearlings for milk purposes, $8,673,752; yearlings for beef purposes, $8,496,777; calves, $8,074,844; all other cattle, $8,800,164.

The values for sheep and lambs on hand were:—Ewes, for breeding, $6,156,918; one year old and over, $941,780; under one year, $4,111,174.

The values for brood sows, $6,369,674; six months old and over, $4,003,182; under six months, $9,436,034.

The values for the several classes of poultry on hand were as follows:—Turkeys, six months old and over, $366,352; under six months, $404,685; geese, six months old and over, $371,492; under six months, $369,051; ducks, six months old and over, $116,325; under six months, $180,534; other fowls, six months old and over, $7,799,751; under six months, $2,844,013.

VALUES PER HEAD OF LIVE STOCK AND POULTRY ON HAND FOR THE YEARS 1892 TO 1928

Years	Horses All Ages	Cattle		Sheep and Lambs	Swine all Ages	Poultry all Kinds
		Milch Cows	Other Cattle			
	$	$ c.	$ c	$ c.	$ c.	$ c.
1928	110	68 33	30 09	11 05	10 80	63
1927	108	60 92	27 05	10 91	12 83	65
1926	108	59 14	26 84	10 93	14 13	70
1925	108	58 55	27 70	11 03	14 55	76
1924	109	55 41	27 05	8 14	8 96	80
1923	111	55 24	25 14	7 27	10 96	82
1922	109	52 68	24 25	6 70	10 65	88
1921	109	51 56	24 77	7 59	12 28	97
1920	127	85 84	44 67	14 34	19 98	1 07
1919	129	88 71	46 37	16 45	19 62	97
1918	131	83 55	45 52	16 14	18 80	76
1917	130	75 54	39 55	10 39	12 89	63
1916	131	66 35	34 91	8 13	10 83	55
1915	139	60 83	32 18	7 05	9 93	54
1914	145	57 01	30 81	6 67	10 14	53
1913	151	50 56	27 29	6 27	9 51	51
1912	147	47 82	25 61	6 05	8 31	47
1911	140	45 31	24 07	5 97	8 36	46
1910	128	40 76	22 43	5 75	8 50	43
1909	120	38 19	21 45	5 54	7 18	37
1908	118	36 90	21 13	5 54	6 67	36
1907	117	36 43	21 15	5 36	6 92	36
1906	116	35 99	21 62	5 15	7 02	36
1905	110	35 06	21 29	4 68	6 44	34
1904	104	34 70	20 84	4 41	6 43	33
1903	97	34 15	20 58	4 40	6 59	31
1902	88	32 96	19 46	4 45	6 69	30
1901	81	31 74	18 57	4 41	6 23	29
1900	76	31 01	17 93	4 29	5 42	29
1899	69	30 31	17 41	4 13	5 16	28
1898	63	28 28	15 98	3 88	5 31	28
1897	59	26 13	14 58	3 55	5 08	27
1896	60	27 60	15 05	3 60	5 12	28
1895	62	29 74	16 08	3 81	5 47	28
1894	69	31 02	17 15	4 27	6 05	29
1893	74	31 63	17 78	4 66	6 54	31
1892	81	29 95	17 69	4 63	5 50	30

The values per head of the various classes on hand June 15th, 1928, were as follows:—

Horses: Stallions, $323; mares, $114.38; geldings, $111.03; colt and fillies, $64.15.

Cattle: Bulls, $67.33; cows for beef purposes, $62.49; yearlings for milk purposes, $32.78; yearlings for beef purposes, $32.48; calves, $14.00; all other cattle, $48.00.

Sheep and lambs: Ewes for breeding, $13.35; one year old and over, $13.79; under one year, $8.48.

Swine: Brood sows, $32.50.; six months old and over, $17.36; under six months, $6.71.

Poultry: Turkeys, six months old and over, $4.07; under six months, $1.00; geese, six months old and over, $2.56; under six months, 83 cents; ducks, six months old and over, $1.21; under six months, 39 cents; all other fowls, six months old and over, 97 cents; under six months, 28 cents.

VALUE OF FARM PROPERTY

LAND, BUILDINGS, IMPLEMENTS AND LIVE STOCK.

The following table gives the estimated values of farm land, farm buildings, implements (including vehicles) and live stock on hand on June 15th, for the years 1882 to 1928.

Years	Land	Buildings	Implements	Live Stock on hand	Total
	$	$	$	$	$
1928	940,311,406	518,209,271	171,181,259	239,493,997	1,869,195,933
1927	906,811,595	506,981,024	168,842,552	230,813,620	1,813,448,791
1926	876,177,637	493,551,144	164,478,485	230,240,766	1,764,448,032
1925	879,212,498	490,027,751	164,188,030	233,160,274	1,766,588,553
1924	885,348,351	484,539,016	164,021,854	222,393,984	1,756,303,205
1923	904,659,633	480,260,117	163,033,141	222,026,255	1,769,979,146
1922	880,896,544	479,451,680	163,830,154	213,840,118	1,738,018,496
1921	851,300,059	484,188,897	159,913,871	218,123,685	1,713,526,512
1920	861,116,234	467,010,867	153,780,378	326,737,337	1,808,644,816
1919	848,767,153	426,649,086	137,310,618	339,607,932	1,752,334,789
1918	819,164,298	380,244,830	109,896,874	324,107,476	1,633,413,528
1917	807,426,986	370,384,055	104,581,053	289,676,977	1,572,069,071
1916	794,676,866	357,313,850	98,020,295	263,869,539	1,513,880,550
1915	794,393,564	352,628,031	95,049,350	254,982,332	1,497,053,277
1914	790,538,706	347,348,643	91,703,876	250,870,078	1,480,461,303
1913	782,993,853	345,303,335	89,702,273	237,591,885	1,455,591,346
1912	758,729,268	335,141,520	86,231,210	225,848,942	1,405,950,940
1911	723,902,419	317,876,963	84,969,426	214,720,424	1,341,469,232
1910	700,905,425	306,517,941	81,570,981	194,416,037	1,283,410,384
1909	680,789,629	297,690,826	77,790,754	184,747,900	1,241,019,109
1908	671,531,018	288,180,121	74,485,730	186,014,756	1,220,211,625
1907	674,505,427	284,672,238	72,910,875	189,484,132	1,221,572,672
1906	661,199,920	273,414,187	71,197,619	183,307,394	1,189,119,120
1905	649,201,364	264,384,514	68,629,546	172,483,760	1,154,699,184
1904	640,544,541	257,995,484	65,992,210	163,383,103	1,127,915,338
1903	620,869,475	247,629,153	63,996,190	154,327,267	1,086,822,085
1902	604,860,063	237,289,668	62,199,787	140,544,814	1,044,894,332
1901	585,354,294	226,575,228	59,897,513	129,496,261	1,001,323,296
1900	574,727,610	219,488,370	57,324,130	123,274,821	974,814,931
1899	563,271,777	213,440,281	54,994,857	115,806,445	947,513,360
1898	556,246,569	210,054,396	52,977,232	103,744,223	923,022,420
1897	554,054,552	206,090,159	51,299,098	93,649,804	905,093,613
1896	557,468,270	205,235,429	50,730,358	96,857,566	910,291,623
1895	572,938,472	204,148,670	50,944,385	103,958,047	931,989,574
1894	587,246,117	204,071,566	51,530,172	111,547,652	954,395,507
1893	602,664,361	200,189,898	51,435,919	116,070,902	970,361,070
1892	615,828,471	195,644,258	51,003,020	117,501,495	979,977,244
1891	621,245,223	191,268,327	50,651,442	108,721,076	971,886,068
1890	622,886,000	193,438,826	50,515,583	104,086,626	970,927,035
1889	632,329,433	192,464,237	51,685,706	105,731,288	982,210,664
1888	640,480,801	188,293,226	49,754,832	102,839,235	981,368,094
1887	636,883,755	184,753,507	49,248,297	104,406,655	975,292,214
1886	648,009,828	183,748,212	50,530,936	107,208,935	989,497,911
1885	626,422,024	182,477,905	48,569,725	100,690,086	958,159,740
1884	625,478,707	173,386,925	47,830,710	103,106,828	949,803,170
1883	654,793,025	163,030,675	43,522,530	100,082,365	961,428,595
1882	632,342,500	132,712,575	37,029,815	80,540,720	882,625,610

PART II—CHATTEL MORTGAGES

Table showing by County Municipalities of Ontario the total number and amount of Chattel mortgages on record and undischarged on December 31st, for the years 1926, 1927 and 1928, together with totals for the Province for all occupations as well as for "farmers" as far as given in the records.

Counties and Districts	1928		1927		1926	
	No.	Amount	No.	Amount	No.	Amount
		$		$		$
Algoma	153	339,021	149	323,506	147	337,997
Brant	257	150,721	202	144,805	178	166,497
Bruce	174	223,050	188	214,380	183	197,556
Carleton	553	565,025	366	508,028	343	618,448
Cochrane	242	320,420	357	374,586	263	268,610
Dufferin	73	104,315	76	99,063	63	64,726
Elgin	242	289,425	242	262,648	216	267,365
Essex	1,218	847,607	426	454,222	351	417,557
Frontenac	207	247,718	182	166,871	223	251,196
Grey	207	223,093	235	281,497	260	322,847
Haldimand	122	106,988	95	108,731	101	85,561
Haliburton	31	17,546	21	18,339	18	9,773
Halton	83	136,584	63	94,883	75	130,553
Hastings	335	473,615	345	437,129	312	514,195
Huron	151	169,235	123	154,750	143	166,125
Kenora	65	163,906	41	86,659	39	205,316
Kent	324	422,798	324	571,311	272	455,960
Lambton	173	235,561	151	235,294	166	322,791
Lanark	118	123,484	120	112,124	122	113,992
Leeds and Grenville	247	294,158	253	271,158	265	275,427
Lennox and Addington	116	302,048	113	297,615	113	298,698
Lincoln	167	197,007	147	221,116	137	237,864
Manitoulin	72	48,203	85	52,286	96	86,752
Middlesex	725	481,571	253	266,062	276	294,392
Muskoka	95	197,655	103	127,803	109	198,246
Nipissing	229	246,078	298	436,050	318	532,144
Norfolk	157	219,216	163	258,352	160	161,244
Northumberland and Durham	257	377,486	291	343,174	276	307,884
Ontario	237	250,553	165	206,594	164	198,307
Oxford	166	305,178	166	333,587	136	276,499
Parry Sound	172	163,039	169	163,831	167	150,283
Peel	61	80,220	59	87,064	75	92,225
Perth	170	214,959	160	201,366	142	152,495
Peterborough	160	133,428	153	173,901	152	181,315
Prescott and Russell	279	318,556	254	306,898	223	226,817
Prince Edward	131	123,706	155	152,809	125	136,992
Rainy River	97	83,764	103	103,680	106	100,813
Renfrew	203	336,675	223	378,250	215	353,001
Simcoe	387	360,064	369	329,996	371	380,703
Stormont, Dundas & Glengarry	304	430,652	360	547,430	317	486,268
Sudbury	321	556,175	374	403,847	369	487,719
Thunder Bay	155	345,247	148	330,880	147	224,895
Timiskaming	203	431,903	331	315,431	349	267,280
Victoria	81	81,904	72	78,194	70	76,698
Waterloo	242	341,319	189	411,740	202	394,797
Welland	214	265,973	223	275,482	149	141,152
Wellington	185	227,417	177	223,472	178	288,617
Wentworth	729	851,204	448	860,022	443	1,671,458
York	3,489	2,817,333	2,242	1,880,238	1,544	1,762,091
Total:						
All occupations	14,779	16,242,803	11,952	14,687,154	10,869	15,360,141
Farmers as given	4,388	4,712,507	4,524	4,264,052	4,566	4,166,540
*Occupations not given	5,362	3,517,391	2,530	2,424,339	2,362	2,641,607

*A number of these may be "farmers." One clerk reports that the solicitors in his district have not given the occupation of a single mortgagor, nearly every clerk reports a number of instruments as unclassified as to occupation. Certain finance corporations have adopted the practice of filing chattel mortgages instead of liens on automobiles. This is noticeable in Essex County where 733 of such instruments were filed in 1928 (included in unclassified).

Twenty-seventh Annual Report

OF THE

Temiskaming and Northern Ontario Railway Commission

ONTARIO GOVERNMENT RAILWAY

Hon. G. Howard Ferguson, Premier

For the Year Ending October 31st

1928

PRINTED BY ORDER OF

THE LEGISLATIVE ASSEMBLY OF ONTARIO

ONTARIO

TORONTO:
Printed and Published by the Printer to the King's Most Excellent Majesty
1929

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The United Press
LIMITED
TORONTO
CANADA

To His Honour W. D. Ross, Esq.,

Lieutenant-Governor of the Province of Ontario.

May It Please Your Honour:

The undersigned has the honour to present to Your Honour the Annual Report of the Temiskaming and Northern Ontario Railway Commission for the twelve months ended October 31st, 1928.

Respectfully submitted,

(Sgd.) G. Howard Ferguson,

Prime Minister.

TEMISKAMING AND NORTHERN ONTARIO RAILWAY COMMISSION

GEO. W. LEE.....Chairman, North Bay
LT.-COL. L. T. MARTIN.....Vice-Chairman, Ottawa
COL. J. I. McLAREN.....Commissioner, Hamilton
W. H. MAUND.....Secretary-Treasurer, North Bay

TEMISKAMING AND NORTHERN ONTARIO RAILWAY

I am privileged to record the termination of another year's successful operation of the Temiskaming and Northern Ontario Railway—one of the best in the history of the road—and to state that from present indications this condition promises to continue in 1929, due to the general prosperity of the country as a whole, and the gradual increasing expansion of the many business undertakings in that part of Northern Ontario tributary to and served by the railway.

The increase in revenue due to added traffic and economy in operation during the period is very encouraging considering the unfavourable weather conditions experienced during the winter months and the autumn of this year. During the latter period the abnormally heavy rainfall throughout the farming districts between North Bay and Cochrane resulted in severe loss to the farming community and settlers over a large area. In this connection a comprehensive measure of relief is now being considered by the Provincial Government in the form of public work to meet the exigencies of the occasion, and the T. & N.O. Railway is lending its assistance to this end by the purchase of railway ties from settlers along the right-of-way to the full extent of present and immediate future requirements.

The general increase of the railroad from a few miles in 1902 to approximately 600 miles of combined trackage in 1928, with a capital investment exceeding $37,000,000—including the subsidiary the Nipissing Central Railway—shows the enormous increase in development and requirements of the territory served.

* * * * *

It is generally acknowledged that the functions of successful railroad operation comprise adequate service at reasonable cost, with sufficient facilities to meet the increasing needs of the commerce of the country served, and a policy of construction and extension in advance of settlement in order to provide for increasing development and expansion.

This has been the aim and determination of Commission for years past, and has proved eminently successful in Northern Ontario, which is constantly opening up and advancing in many lines of endeavour.

In the meantime, transportation rates have been maintained at as low a cost as any railway in the Dominion.

The mining industry goes marching on; to-day's market valuation of the mines of the northland is 880 million dollars. Five years ago it was 260 million dollars and ten years ago 120 million dollars. Ten years is a short time in the life of an industry, and it is anticipated that the mineral output of the Province for 1928 will approximate 100 million dollars, of which sixty-nine millions will represent the metals. This includes the gold output of Northern Ontario estimated at thirty million dollars. The majority of the mines in Porcupine area continue to operate at normal capacity with probable increased output in the near future.

The mining area of Kirkland Lake has shown a wonderful increase in production during current year, averaging for two of the leading mines an increase of fifty per cent.

Dividend disbursement of the precious metals mines will probably aggregate $12,600,000 for 1928, distributed Porcupine area $7,000,000 and Kirkland Lake $5,600,000—with dividends of over fifty-six million dollars paid to date.

Within a period of twenty-five years, the dividends declared and paid by the precious metals industry within the territory served by the T. & N.O. Railway —including 1928—will aggregate 185 million dollars.

* * * * *

The completion of the extension of the Temiskaming and Northern Ontario Railway—through its subsidiary the Nipissing Central Railway—in 1927 and the full operating service in current year from Cheminis into Rouyn, Quebec, has contributed largely to the further development and expansion of the mining operations of this copper-gold district, and new properties have been explored and opened up in consequence. A great deal of renewed activity is reported in adjoining fields including Desmoloizes Township in the north and Malartic Township in the east.

In October, 1928, a further extension of the line from Rouyn townsite to Noranda townsite was completed and opened for traffic, so that now the requirements in passenger and freight service of these two important points are fully served, adding materially to the facilities of the area.

During 1928 the extension of the main line north of Cochrane was completed for a further thirty miles and opened for local traffic.

From various sections of this part of the North, rumours have persisted for some time regarding the discovery of coal deposits indicated by out-croppings. This especially applies to the areas contingent to the Mattagami and Abitibi rivers. Announcement is made that these deposits are now undergoing their first large scale test at the Testing Laboratories of the Dominion Department of Mines at Ottawa. Samples were secured by Dr. W. J. Dyer, provincial geologist, at a point near Blacksmith's Rapids on the Abitibi. A full report will no doubt be soon forthcoming from the provincial authorities at Toronto as to physical properties, commercial values and best method of utilization, et al. Should these deposits be found over a considerable area, the discovery will be of primary importance to Northern Ontario and the Province generally.

In addition, it has been demonstrated that on the Moose river—fifteen miles north of Blacksmith Rapids—there are large deposits of gypsum of fine quality which outcrops for several miles along the Moose and nearby rivers, evidently underlying many square miles of territory. These deposits are inaccessible at present, being about forty miles from rail-head.

The clays of the Moose river basin are said to be the best in the Province. The high grade clay deposits discovered along the Mattagami and Missinabi rivers are probably the most important, being suitable for the manufacture of china, earthenware goods—sewer pipe and other vitrified products—especially fire brick, floor tiling, etc.

Certain geological formations in the Moose river basin are noted by Dr. Dyer as being similar to those in southwestern Ontario, New York, Ohio, Indiana and other oil-bearing states, indicating the possibility of oil and gas within this section.

* * * * * *

In February of this year Commission were successful in floating a bond issue for $6,000,000, instalment debentures, in New York and Toronto, at a price of $96.632, a basis of 4.21 per cent. These were issued under authority of Section 27 of the T. & N.O. Railway Act, Revised Statutes, chapter 53, under which Commission are authorized to borrow moneys from time to time for

railroad construction purposes, rolling stock, etc.; also for similar purposes to finance its subsidiary, the Nipissing Central Railway.

These bonds bear the guarantee of the Provincial Government as to principal and interest.

These bonds brought the highest price yet realized for borrowing under such guarantee in many years, and this reflects highly upon the nature of the security behind the issue.

* * * * * *

Due to the policy of increased branch line construction and main line extension, the mining, farming, lumber and general industries served have been brought into close proximity with the financial and business centres of Canada and the United States. All-steel trains of most modern construction and operation maintain a daily service over the entire system to meet the requirements of the travelling public to the fullest extent; and the consequent ease and comfort of travel have materially contributed to the general prosperity of the territory served.

With the expressed hope and belief that the advancement of Northern Ontario will continue as widely in all lines of endeavour as heretofore, the Temiskaming and Northern Ontario Railway stands prepared, as always, to continue its policy of extension and expansion, whenever necessary, to meet the growing needs of the territory and Province generally.

I am pleased to record that the results of operation of the Temiskaming and Northern Ontario Railway during the fiscal year 1928 have been very successful, showing increased gross revenue in all departments.

Compared with 1927, the accounts are as follows:

	1928	1927
Revenue—Transportation	$4,993,274 01	$4,857,760 91
Revenue—Incidental	345,984 07	294,770 82
	$5,339,258 08	$5,152,531 73
Increase, 1928 (3.62 per cent.)	.....	186,726 35
Expenditure—Operating	$3,822,252 91	$3,735,496 13
Other Expenditures	313,875 71	205,455 18
	$4,136,128 62	$3,940,951 31
Increase, 1928 (4.95 per cent.)	.....	195,177 31
Net Earnings	$1,203,129 46	$1,211,580 42
Decrease, 1928 (0.7 per cent.)	8,450 96	.....

The gross revenue from all sources in 1928 shows a gain of $186,726.35 (3.62 per cent.) as compared with 1927, and gross expenditures an increase of $195,177.31 (4.95 per cent.), resulting in a decreased net revenue of $8,450.96 (0.7 per cent.), as compared with preceding fiscal year.

The reduction in net revenue is directly attributable to certain extraordinary expenses and charges arising in current year which had no counterpart in 1927.

Due to the unprecedented heavy snowfall during winter months, with quick break-up and resulting floods in the spring, accompanied by excessive rainfall at that time and in autumn months, expenditures amounting to $77,392.42 were incurred in necessary bridge repairs, culvert replacement, rock slide removal and washout replacements at many points on main line and branches.

A further disbursement was that of interest charges maturing on Commission's Debenture Bond Issue, amounting to $51,559.65.

Schedule wage increases involved an additional amount of $36,334.25, while a donation to the Research Foundation Fund amounted to $10,000 and the necessary work on the property deeded by the Commission to the City of North Bay and known as "Lee Park" accounted for the sum of $6,834.09—a total disbursement approximating $182,000 over and above the ordinary charges.

During the past year insurance against loss by fire has been carried in the sum of $3,418,350.

In conclusion, I am pleased to record that the railway is in excellent financial and physical condition.

GEO. W. LEE,
Chairman.

North Bay, Ont.

AUDITORS' REPORT

EDWARDS, MORGAN & COMPANY
TORONTO, ONTARIO

December 22nd, 1928.

GEORGE W. LEE, ESQ.,
Chairman, Temiskaming and Northern Ontario
Railway Commission,
North Bay, Ontario.

Dear Sir:

Acting under instructions from the Commissioners, we have conducted an audit of the Treasurer's accounts for the year ending October 31st, 1928, and have satisfied ourselves that all receipts have been properly accounted for, and that satisfactory vouchers are on hand to cover disbursements. We have checked the balances in the hands of the Treasurer and find them to be in agreement with the accounts as shown by the general ledger.

The accounts of the Treasurer are in good order and well kept. All information asked for has been cheerfully given. We also wish to acknowledge the courtesies of the Commission and its employees at all times.

Yours very truly,

(Sgd.) EDWARDS, MORGAN & COMPANY

TEMISKAMING AND NORTHERN ONTARIO RAILWAY COMMISSION

Mileage operated at the close of the fiscal year was as follows:

	Miles	Miles
MAIN LINE:		
North Bay to Cochrane	252.29	
Cochrane to Island Falls Junction	43.00	
		295.29
BRANCH LINES:		
Lorrain Branch	17.00	
Elk Lake Branch	28.50	
Charlton Branch	7.60	
Iroquois Falls Branch	7.00	
Porcupine Branch	33.11	
		93.21
OTHER TRACKS:		
Yard Tracks and Sidings	106.99	
Liskeard Spur	1.12	
Mattagami River Spur	2.96	
Kerr Lake Spur	1.25	
Double Track	1.70	
		114.02
PRIVATE SIDINGS OPERATED BY RAILWAY:		
Private Siding Agreement	18.83	
Owned by Private Companies	0.84	
		19.67
Total Mileage Operated		522.19
SIDINGS OPERATED BY PRIVATE COMPANIES:		
Private Siding Agreement		7.12
LEASED TO NIPISSING CENTRAL RAILWAY:		
Main Track	5.85	
Sidings	1.14	
		6.99
Total Mileage		536.30

PURCHASING AND STORES DEPARTMENT

Statement of Purchases and Issues, Fiscal Year, 1927-1928

Stock	1927		1928	
	Purchases	Issues	Purchases	Issues
Shop	$762,965 08	$799,552 92	$612,649 80	$608,061 46
Soft Coal	585,730 96	604,804 45	632,550 32	649,599 51
Hard Coal	17,715 47	19,215 43	24,164 95	21,991 20
Oil and Waste	30,591 86	30,463 71	34,191 40	31,626 85
Stationery	32,029 52	31,153 68	34,293 05	34,077 03
Rail	353,835 37	303,179 00	173,668 60	245,414 80
Tie	168,973 87	237,536 68	176,622 87	153,197 26
Ice	10,606 64	12,057 20	10,886 87	9,946 95
	$1,962,448 77	$2,037,963 07	$1,699,027 86	$1,753,915 06
Total Purchases	$1,962,448 77	.....	$1,699,027 86	.....
Total Issues	2,037,963 07	.....	1,753,915 06	.....
	$4,000,411 84		$3,452,942 92	

GENERAL BALANCE SHEET, OCTOBER 31st, 1928

Assets

Property Owned:		
Cost of Road	$27,569,306 33	
Cost of Equipment	5,099,120 44	
		$32,668,426 77
Nipissing Central Railway		4,603,847 80
Current Assets:		
Cash	$380,665 10	
Accounts Collectible	237,291 38	
Balance due on Townsite Sales	10,305 52	
Agents and Conductors	27,808 89	
Traffic Balance—Freight	310,195 36	
Traffic Balance—Tickets	40,920 75	
Material and Supplies	812,183 32	
Ballast Pit Operations	49,249 76	
Other Assets	295 76	
		1,868,915 84
Deferred Assets:		
Pension Department		137,111 15
Unadjusted Debits:		
Surveys	$37,816 08	
Insurance Premiums paid in Advance	1,628 25	
Treasurer's Advance	250 00	
Discount—Funded Debt	202,026 00	
Accounts in Suspense	1,207 35	
		242,927 68
		$39,521,229 24

Liabilities

Provincial Loan Account		$30,207,934 92
Long Term Debt:		
Funded Debt Unmatured		6,000,000 00
Current Liabilities:		
Audited Accounts and Wages Payable	$1,769,963 86	
Traffic Balance—Car Service	16,614 65	
Debenture Interest	78,800 00	
War Tax	1,465 34	
		1,866,843 85
Deferred Liabilities:		
Pension Fund Reserve		137,111 15
Unadjusted Credits:		
Accrued Depreciation	$1,009,579 73	
Fidelity Insurance Reserve	1,250 00	
Accounts in Suspense	33 17	
		1,010,862 90
Free Surplus:		
Profit and Loss—Balance		298,476 42
		$39,521,229 24

Profit and Loss

Profit and Loss on Retired Road and Equipment	$182,000 00	By Balance—October 31st, 1927	$580,718 91
Townsites	1,345 55	Result Operation for Year Ended October 31st, 1928	1,203,129 46
Doubtful Accounts	1,442 15	Unclaimed Vouchers	10 95
Unclaimed Wages	595 20		
Paid Treasurer of Ontario	1,300,000 00		
Balance Carried Forward	298,476 42		
	$1,783,859 32		$1,783,859 32

COMPARATIVE STATEMENT OF EARNINGS, EXPENDITURES AND RESULT OF OPERATION, NOVEMBER 1st, 1926, TO OCTOBER 31st, 1928

	Revenue	Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
	TRANSPORTATION	$ c.	$ c.
101.	Freight	3,437,452 26	3,336,174 25
102.	Passenger	1,277,950 61	1,248,100 25
103.	Excess baggage	10,895 63	11,688 85
105.	Parlour and chair car	3,017 95	3,195 45
106.	Mail	61,796 21	56,311 95
107.	Express	184,861 56	177,552 22
109.	Milk	1,946 25	1,920 83
110.	Switching	14,787 77	18,954 51
111.	Special Service Train	565 77	2,675 00
112.	Other freight train	.....	1,187 60
	Total	4,993,274 01	4,857,760 91
	INCIDENTAL		
131.	Dining and buffet	44,382 45	40,235 70
133.	Station, train and boat privileges	24,171 00	24,171 00
135.	Storage—freight	2,742 94	2,305 96
136.	Storage—baggage	779 35	859 90
137.	Demurrage	9,013 61	8,173 00
138.	Telegraph and telephone	237,894 47	193,992 30
142.	Rent of buildings and other property	20,937 75	20,943 05
143.	Miscellaneous	6,062 50	4,089 91
	Total	345,984 07	294,770 82
	JOINT FACILITY		
152.	Joint facility—Dr.	203 97	403 42
	Total	203 97	403 42
	Total Revenue	5,339,054 11	5,152,128 31
	EXPENDITURES		
	Maintenance of way and structures	916,619 47	919,374 22
	Maintenance of equipment	763,884 66	785,843 79
	Traffic	32,449 69	27,960 52
	Transportation	1,770,146 53	1,690,827 38
	Miscellaneous operations	135,529 43	120,507 16
	General	211,082 76	195,823 35
	Transportation for investment—Cr.	7,459 63	4,840 29
	Total Operating Expenses	3,822,252 91	3,735,496 13
	Balance	1,516,801 20	1,416,632 18
	OTHER INCOME		
	Ore royalties	Dr. 4,853 21	Dr. 4,305 45
	Hire of freight cars	Dr. 210,902 89	Dr. 192,219 92
	Rent—locomotives	13,211 17	11,302 78
	Rent—passenger-train cars	7,924 99	2,989 62
	Rent—work equipment	14,537 83	18,159 08
	Joint facility rent income	29,789 81	25,051 72
	Joint facility rents	Dr. 4,175 50	Dr. 4,137 48
	Income from lease of road	2,554 15	6,129 96
	Interest and exchange	Dr. 37,461 67	Dr. 68,329 77
	Interest—funded debt	Dr. 119,989 42	.....
	Amortization of discount—funded debt	Dr. 4,439 95	.....
	Miscellaneous income	132 95	307 70
	Total	Dr. 313,671 74	Dr. 205,051 76
	Net Result	1,203,129 46	1,211,580 42

Maintenance of Way and Structures

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
201.	Superintendence	30,614 24	30,826 17
202.	Roadway maintenance	117,971 31	106,187 27
208.	Bridges, trestles and culverts	59,778 14	25,305 30
212.	Ties	108,339 32	123,878 94
214.	Rails	127,790 49	133,935 40
216.	Other track material	48,785 01	44,280 53
218.	Ballast	245 88	19,459 51
220.	Track-laying and surfacing	209,149 51	247,848 40
221.	Right-of-way fences	2,627 44	5,561 17
223.	Snow and sand fences and snowsheds	9 63	.....
225.	Crossings and signs	4,731 14	5,109 82
227.	Station and office buildings	33,798 07	43,834 17
229.	Roadway buildings	4,971 09	6,077 92
231.	Water stations	13,220 75	8,206 79
233.	Fuel stations	1,969 18	2,615 66
235.	Shops and engine houses	21,203 54	20,478 31
247.	Telegraph and telephone lines	10,203 19	11,626 01
249.	Signals and interlockers	1 11	46
253.	Power plant buildings	229 53	318 08
257.	Power transmission systems	53 50	110 48
259.	Power distribution systems	114 70	775 29
261.	Power line poles and fixtures	.....	27 00
265.	Miscellaneous structures	.....	21 88
269.	Roadway machines	10,275 77	9,191 75
271.	Small tools and supplies	12,449 62	10,463 62
272.	Removing snow, ice and sand	107,793 34	75,948 38
273.	Assessments for public improvements	52 96	.....
274.	Injuries to persons	7,841 83	4,544 93
275.	Insurance	6,421 58	6,480 62
276.	Stationery and printing	1,485 44	1,779 98
277.	Other expenses	568 95	1,202 85
278.	Maintaining joint tracks, yards and other facilities —Dr.	1,623 50	1,502 00
279.	Maintaining joint tracks, yards and other facilities —Cr.	27,700 29	28,224 47
280.	Equalization—way and structures—Dr.	350,933 85	428,735 66
280.	Equalization—way and structures—Cr	350,933 85	428,735 66
	Total	916,619 47	919,374 22

Maintenance of Equipment

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
301.	Superintendence	30,618 86	31,089 62
302.	Shop machinery	11,924 15	19,028 71
304.	Power plant machinery	5,756 68	4,744 66
308.	Steam locomotives—repairs	274,639 45	256,895 75
309.	Steam locomotives—depreciation	45,141 58	45,391 59
314.	Freight train cars—repairs	173,820 93	195,095 73
315.	Freight train cars—depreciation	20,902 06	20,896 38
316.	Freight train cars—retirements	2,563 96	365 35
317.	Passenger train cars—repairs	106,046 47	109,224 11
318.	Passenger train cars—depreciation	25,031 68	24,158 14
320.	Motor equipment of cars—repairs	734 63	535 85
326.	Work equipment—repairs	51,439 37	63,480 56
327.	Work equipment—depreciation	9,069 81	8,112 85
328.	Work equipment—retirements	3,576 44	3,905 89
332.	Injuries to persons	1,344 24	1,536 14
333.	Insurance	9,724 30	10,198 25
334.	Stationery and printing	1,466 29	1,567 60
335.	Other expenses	482 07	Cr. 755 15
337.	Maintaining joint equipment at terminals—Cr.	10,398 31	9,628 24
	Total	763,884 66	785,843 79

Traffic

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
351.	Superintendence	13,456 38	13,351 00
352.	Outside agencies	4,596 04	2,280 73
353.	Advertising	9,041 41	7,709 64
354.	Traffic associations	1,333 50	1,261 50
356.	Industrial and immigration bureaus	25 00	30 00
358.	Stationery and printing	3,997 36	3,327 65
	Total	32,449 69	27,960 52

Transportation

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
371.	Superintendence	28,678 35	28,821 26
372.	Dispatching trains	25,908 89	24,540 00
373.	Station employees	315,355 26	304,658 80
374.	Weighing, inspection and demurrage bureaus	1,085 10	1,064 02
376.	Station supplies and expenses	37,672 52	35,755 51
377.	Yardmasters and yard clerks	49,831 41	46,796 98
378.	Yard conductors and brakemen	62,675 68	63,042 03
379.	Yard switch and signal tenders	3,672 23	3,682 39
380.	Yard enginemen	43,149 22	41,237 57
382.	Fuel for yard locomotives	57,628 06	50,004 47
385.	Water for yard locomotives	1,684 78	1,591 53
386.	Lubricants for yard locomotives	427 69	402 91
387.	Other supplies for yard locomotives	402 62	351 05
388.	Enginehouse expenses—yard	22,959 58	25,170 91
389.	Yard supplies and expenses	1,494 51	1,523 39
390.	Operating joint yards and terminals—Dr.	2,548 00	2,464 00
391.	Operating joint yards and terminals—Cr.	132,400 33	131,198 50
392.	Train enginemen	251,953 38	237,771 53
394.	Fuel for train locomotives	457,120 96	437,770 53
396.	Train power purchased	.....	30 68
397.	Water for train locomotives	27,652 42	27,554 98
398.	Lubricants for train locomotives	6,059 09	5,995 92
399.	Other supplies for train locomotives	5,323 47	5,149 14
400.	Enginehouse expenses—train	82,108 77	80,833 84
401.	Trainmen	281,637 82	277,348 10
402.	Train supplies and expenses	83,698 86	81,782 98
405.	Crossing protection	718 73	1,355 09
410.	Stationery and printing	19,302 44	17,873 54
411.	Other expenses	77 63	Cr. 57 62
413.	Operating joint tracks and facilities—Cr.	300 00	300 00
414.	Insurance	2,764 47	2,848 83
415.	Clearing wrecks	10,775 55	2,410 78
416.	Damage to property	461 28	293 94
417.	Damage to live stock on right-of-way	119 45	379 41
418.	Loss and damage—freight	5,755 36	3,324 90
419.	Loss and damage—baggage	90 00	8 13
420.	Injuries to persons	12,053 28	8,544 36
	Total	1,770,146 53	1,690,827 38

Miscellaneous Operations

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
441.	Dining and buffet service	45,002 27	42,469 10
447.	Commercial telegraph—maintenance	9,838 28	10,141 43
448.	Commercial telegraph—operation	31,877 72	27,629 24
449.	Commercial telephone—maintenance	12,032 53	10,230 21
450.	Commercial telephone—operation	36,778 63	30,037 18
	Total	135,529 43	120,507 16

General

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
451.	Salaries and expenses of general officers	58,743 31	58,277 63
452.	Salaries and expenses of clerks and attendants	105,013 92	105,179 29
453.	General office supplies and expenses	4,947 28	4,390 87
454.	Law expenses	4,808 00	4,815 00
455.	Insurance	136 50	244 99
457.	Pensions	12,004 89	12,000 00
458.	Stationery and printing	6,137 67	5,740 20
460.	Other expenses	19,888 71	5,942 69
462.	General joint facilities—Cr.	597 52	767 32
	Total	211,082 76	195,823 35

NIPISSING CENTRAL RAILWAY COMPANY

Mileage Operated at the Close of the Fiscal Year 1928

Electric Lines

	Miles	Miles
Owned by Company:		
Main track	4.92	
Sidings	1.79	
		6.71
Leased from T. & N. O. Railway:		
Main track	5.85	
Sidings	1.13	
		6.98
		13.69

Steam Lines

Main track, Swastika to Noranda, Que	59.74	
Sidings and yard tracks	9.41	
		69.15
Private sidings under siding agreement	1.28	
Private sidings privately owned	0.35	
		1.63
		70.78

Electric lines	13.69 miles
Steam lines	70.78 miles
Total	84.47 miles

NIPISSING CENTRAL RAILWAY COMPANY

PURCHASING AND STORES DEPARTMENT

Statement of Purchases and Issues, Fiscal Year, 1927-1928

Stocks	1927		1928	
	Purchases	Issues	Purchases	Issues
Various stocks	$8,736 47	$192,705 47	$10,201 08	$9,341 77
Total purchases	$8,736 47	.....	$10,201 08	.....
Total issues	192,705 47	.....	9,341 77	.....
	$201,441 94		$19,542 85	

NIPISSING CENTRAL RAILWAY

General Balance Sheet, October 31st, 1928

Assets			Liabilities		
Property owned:					
Cost of road	$2,288,962 78		Capital Stock		$159,000 00
Cost of equipment	83,002 63		T. & N.O. Railway—advance		2,417,132 40
		$2,371,965 41			
Current Assets:			Current Liabilities:		
Cash	$38,174 51		Audited Accounts	$208,134 81	
Accounts collectible	7,312 70		Traffic balances	51,348 29	
Balance due on townsite sales	4,218 72		War tax	175 00	
Agents and conductors	10,757 04				259,658 10
Material and supplies	15,469 57				
		75,932 54			
Unadjusted Debits:					
Insurance premiums paid in advance		41 54			
Other Assets:					
Franchise	$1 00				
Profit and loss—balance	387,850 01				
		387,851 01			
		$2,835,790 50			$2,835,790 50

Profit and Loss

To balance, October 31st, 1927		$292,785 79	Townsites	$216 75
Profit and loss on retired road and equipment		14,826 88	By balance, October 31st, 1928	387,850 01
Result operation for fiscal year ended October 31st, 1928:				
Steam lines—deficit	$49,121 06			
Electric lines—deficit	31,333 03			
		80,454 09		
		$388,066 76		$388,066 76

COMPARATIVE STATEMENT OF EARNINGS AND EXPENDITURES, AND RESULT OF OPERATION, NOVEMBER 1st, 1926, TO OCTOBER 31st, 1928

STEAM LINES

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
	REVENUE		
	TRANSPORTATION	$ c.	$ c.
101.	Freight	114,286 89	60,689 21
102.	Passenger	87,077 54	35,248 15
103.	Excess baggage	802 80	200 60
106.	Mail	1,431 32	621 28
109.	Milk	263 28	.....
110.	Switching	259 89	119 52
111.	Special service train	.....	75 00
	Total	204,121 72	96,953 76
	INCIDENTAL		
135.	Storage, freight	1,371 17	435 80
136.	Storage, baggage	241 55	44 05
137.	Demurrage	2,832 00	1,821 77
142.	Rent of buildings and other property	2,078 35	720 60
143.	Miscellaneous	784 95	63 00
	Total	7,308 02	3,085 22
	Total Revenue	211,429 74	100,038 98
	EXPENDITURES		
	Maintenance of way and structures	58,131 92	26,109 37
	Maintenance of Equipment	20,424 06	8,629 96
	Traffic	493 46	36 40
	Transportation	143,173 15	79,591 14
	General	103 06	71 56
	Transportation for Investment—Cr	255 24	17 80
	Total Operating Expenses	222,070 41	114,420 63
	BALANCE	Dr. 10,640 67	Dr. 14,381 65
	OTHER INCOME		
	Hire of freight cars	Dr. 33,678 05	Dr. 19,063 45
	Rent, locomotives	Dr. 2,729 15	Dr. 1,295 80
	Rent, passenger train cars	Dr. 1,961 19	Dr. 3,692 69
	Miscellaneous rents	Dr. 120 00	Dr. 120 00
	Miscellaneous income	8 00	5 00
	Total	Dr. 38,480 39	Dr. 24,166 94
	NET RESULT	Dr. 49,121 06	Dr. 38,548 59

COMPARATIVE STATEMENT OF EARNINGS AND EXPENDITURES, AND RESULT OF OPERATION, NOVEMBER 1st, 1926, TO OCTOBER 31st, 1928

ELECTRIC LINES

RECEIPTS

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
	I.—Revenue from Transportation—	$ c.	$ c.
101.	Passenger revenue	53,070 22	59,237 98
102.	Baggage revenue	951 60	1,407 25
103.	Parlor, sleeping, dining and special car revenue	42 00	237 00
108.	Switching revenue	5,138 35	5,047 03
	Total	59,202 17	65,929 26
	II.—Revenue from other Railway Operations—		
110.	Station and car privileges	500 00	500 00
113.	Demurrage	435 00	1,078 00
117.	Rent of buildings and other property	563 00	601 00
119.	Miscellaneous	21 21	51 15
	Total	1,519 21	2,230 15
	Total Revenue	60,721 38	68,159 41

EXPENDITURES

I.	Way and structures	22,603 35	10,753 60
II.	Equipment	19,528 81	17,410 37
III.	Power	15,592 96	15,582 15
IV.	Conducting transportation	23,468 06	24,222 75
VI.	General and miscellaneous	4,803 53	2,964 30
	Total Operating Expenses	85,996 71	70,933 17
	Balance	Dr. 25,275 33	Dr. 2,773 76
	Deductions from Income—		
	Interest	3,503 55	8,274 61
	Rent for leased road	2,554 15	6,129 96
	Total	6,057 70	14,404 57
	Net Result	Dr. 31,333 03	Dr. 17,178 33

Way and Structures

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct .31st, 1927
		$ c.	$ c.
1.	Superintendence of way and structures	176 71	178 84
2.	Ballast	143 40	186 90
3.	Ties	4,070 25	1,210 11
4.	Rails	1,562 27	587 59
5.	Rail fastenings and joints	107 33	104 83
6.	Special work	47 88	47 88
8.	Track and roadway labour	6,920 90	4,530 90
9.	Miscellaneous track and roadway expenses	77 04	111 78
10.	Paving	500 00	.....
12.	Removal of snow and ice	6,776 57	2,797 03
15.	Bridges, trestles and culverts	709 58	71 04
16.	Crossings, fences and signs	188 01	200 23
18.	Telephone and telegraph lines	84 87	67 92
20.	Poles and fixtures	1 49	5 86
22.	Distribution system	1,049 11	519 15
24.	Buildings, fixtures and grounds	187 94	133 54
	Total	22,603 35	10,753 60

Equipment

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
29.	Superintendence of equipment	559 72	518 87
30.	Passenger and combination cars	2,962 83	3,440 88
32.	Service equipment	167 55	127 23
33.	Electric equipment of cars	2,763 38	1,946 17
34.	Locomotives	1,520 24	134 92
36.	Shop equipment	50 02	4 35
37.	Shop expenses	8 45	20 45
41.	Equipment retired	11,496 62	11,217 50
	Total	19,528 81	17,410 37

Power

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
45.	Superintendence of power	240 00	240 00
47.	Power plant equipment	12 12	.....
48.	Substation equipment	108 11	138 23
57.	Substation employees	2,776 73	2,804 92
59.	Power purchased	12,456 00	12,399 00
	Total	15,592 96	15,582 15

Conducting Transportation

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
63.	Superintendence of transportation	1,042 05	1,086 45
64.	Passenger conductors, motormen and trainmen	13,952 52	14,477 65
65.	Freight and express conductors, motormen and trainmen	4,717 92	4,224 60
66.	Miscellaneous car service employees	3 42	.....
67.	Miscellaneous car service expenses	1,101 72	1,249 68
69.	Station expenses	539 03	692 79
70.	Carhouse employees	1,739 23	1,529 31
71.	Carhouse expenses	372 17	738 13
78.	Other transportation expenses	.....	224 14
	Total	23,468 06	24,222 75

General and Miscellaneous

		Nov. 1st, 1927, to Oct. 31st, 1928	Nov. 1st, 1926, to Oct. 31st, 1927
		$ c.	$ c.
83.	Salaries and expenses of general officers	4 00	4 00
84.	Salaries and expenses of general office clerks	872 31	840 00
85.	General office supplies and expenses	96 12	125 20
86.	Law expenses	1,868 36	2 00
89.	Miscellaneous general expenses	52 00	.....
92.	Injuries and damages	425 73	373 60
93.	Insurance	490 79	530 45
94.	Stationery and printing	293 32	303 05
97.	Rent of tracks and facilities	600 00	600 00
98.	Rent of equipment	100 90	186 00
	Total	4,803 53	2,964 30

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